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THE

MEDICAL EXAMINER.

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NOTICE TO CORRESPONDENTS.

Communications and Books for notice should be addressed to the Editor, care of Messrs. Lindsay & Blakiston.

Letters, &c., connected with the *business affairs* of the Journal should be addressed to the Publishers.

Papers for publication must be received *before* the 16th of the month, or they cannot appear in the forthcoming number.

The following Journals have been received in exchange:

Medical News and Library, August.
New Jersey Medical Reporter, ditto.
New York Medical Times, ditto.
American Medical Monthly, ditto.
American Medical Gazette, ditto.
Boston Medical and Surgical Journal, ditto.
Buffalo Medical Journal, ditto.
American Journal of Dental Science, ditto.
Stethoscope, ditto.
Virginia Medical and Surgical Journal, ditto.
New Hampshire Journal of Medicine, ditto.
Nelson's American Lancet, ditto.
Ohio Medical Counsellor, ditto.
North-Western Medical and Surgical Journal, ditto.
Montreal Medical Chronicle, ditto.
Peninsular Journal of Medicine, ditto.
Nashville Journal of Medicine, ditto.
Western Journal of Medicine and Surgery, ditto.
New Orleans Medical News, ditto.
Medical Reporter, July.
Memphis Medical Recorder, ditto.
Southern Medical and Surgical Journal, August.
Western Lancet, July and August.
Iowa Medical Journal, June and July.
American Journal of Dental Science, July.
American Journal of Insanity, ditto.
British and Foreign Medico-Chirurgical Review, ditto.
Dublin Quarterly Review, ditto.
Glasgow Medical Journal, ditto.
Journal of Psychological Medicine, ditto.
Edinburgh Medical Journal, July and Angust.
London Pharmaceutical Journal, ditto.
London Lancet. (Weekly.)
London Medical Times and Gazette, ditto.
Dublin Medical Press, ditto.

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BOOKS AND PAMPHLETS RECEIVED.

Rokitansky's Pathological Anatomy. Blanchard & Lea.
Todd on the Nervous System. Lindsay & Blakiston.
Jameson on Epidemic Cholera. Lindsay & Blakiston.
History of the American Medical Association. Lippincott, Grambo & Co.
Barton's Cause and Prevention of Yellow Fever. Lindsay & Blakiston.
Tanner's Clinical Medicine. Blanchard & Lea.
Mansfield's Memoir of Dr. Drake. Applegate & Co., Cincinnati.
Transactions of the Medical Society of Pennsylvania.

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The foreign correspondents of the Examiner will please direct their Exchanges, Books for review, and other communications, to the care of Trubner & Co., No. 12 Paternoster Row, London, or Mr. H. Bosange, 21 Bis, Quai Voltaire, Paris.

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THE

MEDICAL EXAMINER.

NEW SERIES.—NO. CXXIX.—SEPTEMBER, 1855.

ORIGINAL COMMUNICATIONS.

The Plague, its Origin and Disappearance.

By Aug. Theod. Stamm.

It is the object of this paper to give some information of the most destructive of all diseases—a disease which for centuries and centuries, resisting the efforts of the most learned physicians, has produced the greatest misery and many scenes of deepest immorality and degradation. No one has yet explained the total disappearance, for the last ten years, of this scourge; neither has the real place of its origin ever been demonstrated. I do not pretend to know the nature of the specific plague poison; no one has yet recognised its essence. But from my own observations in the native country of the Plague, I hope finally to prove where this poison was year after year generated, and by what means it has been eradicated.

The Plague, λοιμος, Pestis seu Pestis bubonaria orientalis, Typhus pestis seu Typhus pestilentialis, die Pest, la Peste, Typhus d'Orient, Peste, Pestilenza, Pestilencia, etc., was a disease chiefly at home in Syria, Asia Minor, European Turkey and Egypt, but often spreading over the whole coast of the Mediterranean, and even over the whole of Europe, penetrating far into the interior of Russia, and when once there unchecked by the northern winter of Moscow.

It is difficult to decide whether the Plague be identical with the epidemics recorded by Moses, David, Homer, Thucydides, Herodotus, Dionysius of Halicarnassus and others, or whether the beginning of this disease may be found in the Justinian Plague, which from 542–594 raged almost without interruption in all parts of the Roman Empire, because in these old writers the symptoms are not described with such accuracy as to arrive at quite certain results.

Thus much we know for certain, that since the time of the Justinian Plague the disease has repeatedly visited not only large countries, but almost the whole of the old world, and only since this time it seems to be characterized by buboes; and after once having adopted this form it appeared indestructible, raging for more than a thousand years, and in some places never disappearing.

I do not intend to enter here into a minute description of the Plague, but only mention that it is a fever of the most aggravated kind, chiefly characterized by buboes or inflammation, swelling and suppuration of the lymphatic glands, although, according to the special properties of the disease, many varying symptoms have been observed; thus at the commencement of the Plague, cases occur where nothing is to be observed but the symptoms of a severe typhus fever, the patient generally dying in the course of a day, or from apoplexy (apoplexia pestilentialis) after a few hours of great prostration, whilst towards the end of an epidemic it assumes often such a mild form that a slight swelling of the lymphatic glands and a mild fever is all that can be observed.

Those who want more accurate information of the different forms and symptoms may find it in the writings and reports of Thomas Sydenham, Heberden, Diemerbrock, Nathan Hodges, Pestalozzi, Chicoyneau, Beerwinckel, Rothman, Melzer, Patrick Russel, Mead, Chirac, Enrico di Wolmar, Verney, Deidier, Bertrand, Souliers, Clot-Bey, Bulard, Lachèze, Gaetani-Bey and numerous other medical men, many of whom not only treated and observed the disease, but in their heroism and scientific zeal exposed themselves with undaunted courage to the danger of post mortem examinations.

The treatment of the Plague.—The opinion of physicians in regard to the treatment of the Plague, were but too often in con-

tradictory opposition. The antiphlogistic method had a most celebrated defender in Thomas Sydenham; but, after more accurate inquiry, it was found to be erroneous. Chicoyneau, as well as Audon, Deidier, Verney and the other physicians at Marseilles, were much opposed to this method. Russell and Enrico di Wolmar did not reject bleeding, but whether they ever derived real advantage from it, remains, at least, very doubtful. Palloni was in favor of calomel; but, according to Bulard, calomel is always thrown off without effect, by vomiting or stools. Paris thinks that nothing but cold water should be employed. Savaresi, Bulard, Pugnet had recourse to a slightly stimulating system, and tried ether, alcohol, camphor, ammonia, etc., but success did not recommend these remedies.

The system of evacuating the stomach and bowels has, if properly administered, frequently proved beneficial; emetics and strong cathartics, given at the beginning of the disease, have been considered the best remedies. The diuretics have been recommended by Sydenham to be employed in combination with the antiphlogistic treatment; and Mead is also a defender of the diuretic method. The invigorating system in which the cordials were used had for some time a great reputation, but from their want of success their use was quite abandoned. Narcotics, too, have been tried; opium, strychnia, lactucarium, and belladonna have been given. Dr. Aubert prescribed Hachisch in the Egyptian Plague of 1833. Frictions with oil and various other treatments have never done very much for the cure of the disease. In the treatment of the buboes and carbuncles, science was likewise at fault, and did not yield successful remedies; the simple chirurgical method has proved as good as any other. But, however treated, about two-thirds of those attacked have always died. Emetics and cathartics, given at the beginning, cleanliness, cold water and demulcent drinks would probably, if generally employed, have yielded the best results. The poison once generated, is mightier than all the remedies used against it, and coming like a scourge upon careless man, should teach him that the great aim should be prevention rather than the cure of disease.

The generating of the Plague.—Great aridity after copious rain and inundations, winds constantly blowing from the same direction, sudden change of the seasons, scarcity of food, etc.,

have been found concurrent with the entrance of the Plague, and the variation of those conditions seemed often connected with the course and character of the disease. But how uncertain such indications are, is manifest, if we consider that frequently in the midst of prosperity, and during the most agreeable weather, the Plague attacked populations quite unconscious of the dreadful evil so near them. Such striking contrasts annihilated all theories in reference to its generation, and, at those times, when, during shorter or longer intervals, the disease was spread over the whole of Europe, the people were lost in the most uncertain conjectures.

At last the more civilized nations of Europe inclined to the opinion that the East and Egypt were the principal countries of the Plague, as this epidemic was found to be endemic there, even at times when the more cultivated and cleaner parts of Europe were exempt; and as the intense contagious power of this disease had manifested itself most terribly, and cases of plague frequently occurred in consequence of the intercourse of men and the exchange of merchandize along the infected frontier, it was resolved that, in order to prevent its introduction, the quarantine should be established, and that if the disease should, notwithstanding, be introduced, a *cordon sanitaire* should be drawn around the infected district—measures which were executed with the approbation of the inhabitants, who were in constant dread of an outbreak of the epidemic.

After this it became evident that the plague-poison came always from the East and Egypt towards the protected frontiers, whilst formerly it wandered through Europe in all directions, longitudinally and latitudinally.

This is in itself sufficient to contradict the views of ancient and modern physicians, who wish to maintain that the disease is alone dependent upon the condition of the atmosphere and the change of weather and season.

The real sphere of action for the Plague being in this way confined to the East and Egypt, that is to say to the Turkish Empire, in which no mutual quarantine existed, the controversy sprung up where, in this Empire, the exact spot for generating the disease was to be found.

The lower part of the Danube, Constantinople, Smyrna,

Trebisond, the capitals of Barbary, Cairo, etc., were distinguished as places where the Plague was chiefly at home, and one of the cities often accused the other of being the generator of the epidemic.

Egypt, which exhibits so many peculiarities in its natural conditions, had indeed for a long time been looked upon as the native place of the Plague, but even sensible and learned writers opposed this view ; thus, Prosper Alpinus says that the Plague is imported into Egypt from Greece, Syria and Barbary, whilst Volney, Enrico di Wolmar, Olivier and others thought that the real seat of this disease was to be found at Constantinople, because there it was never quite extinguished for any length of time.

The controversy where in the Turkish Empire the Plague was generated became the more confused the more interest the inhabitants of each city and country had in clearing themselves from such a reproach. The disease indeed usually came from Alexandria to Constantinople, still several instances occurred where Alexandria was infected by Constantinople. Yet at last the opinion gained ground that, however favorable to the Plague was the filth of Constantinople and other places, it could there only be considered as an exotic, indigenous to and coming from Egypt. Thus L. Ch. Roche wrote an article in the *Dictionnaire de Médecine et de Chirurgie pratiques*, t. xii. 1834, by which he tries to prove that the plague is indigenous to the country of the Pharaohs, citing, in his favor, the opinions of Desgenettes, Larrey, Pugnet, Savaresi, (physician to the French-Egyptian army,) Pariset and Lagasquie, (members of a commission in the year 1828, sent by the French government for the study of the disease,) Paris, Fodéré, etc.

But if, according to the opinion of most physicians, we have to accept Egypt as the country whence the Plague has most frequently extended itself; the question again arises if in Egypt the cause at once originated all over the land, or if it spread from certain fixed points. In reference to this question, it becomes evident, after earnest inquiry, that during past epidemics, Cairo and the villages of the Delta, near this city, were generally attacked first and suffered most. The reason of this phenomenon may easily be found in the condition and situation of the place.

Cairo has several hundred thousand inhabitants. Before the watering and sweeping of the streets was introduced by the vice-roy Mehemed Ali, they were full of filth. A canal which goes through the city and receives all kinds of refuse was very much neglected; its borders had always been considered as most unhealthy and most frequented by the plague. Moreover, Cairo was surrounded with an almost complete circle of hills, 150 to 300 feet in height, and where these ceased, by a projection of the Mokattam mountain. Thus purifying winds were cut off from the city. The disease always appeared after the receding waters of the Nile had left much animal and vegetable matter decaying and producing miasmata under the combined influence of heat and moisture, and after raging several months, disappeared with the Nucta, (a heavy dew,) and the scorching rays of the June sun. Nowhere, throughout Egypt, was the generating of such miasmata more favored than in and around Cairo; the refuse of several hundred thousand inhabitants, the neglected canal, and a marsh near the city, exhaled their poisonous gases, which, at once, ripening in this basin surrounded by hills, seized upon thousands of people, whose neglected corpses increased the corruption of the air. In this way, first Cairo and the villages around it were desolated, then other parts of Egypt, the Turkish Empire, and before the introduction of the protective quarantine and *cordons sanitaires*, almost the whole of the old world; the disease travelling in all directions, communicating itself to healthy places. Thus the Plague of Marseilles infected other parts of the province and southern France, but it came, nevertheless, originally, from Egypt to Marseilles.

The disappearance of the Plague.—Mehemed Ali gave orders to clean the city, and to water and sweep the streets every morning, but the state of health did not materially improve. It had already been remarked by physicians of the army at the time of the French-Egyptian expedition, that the encircled position of the city, combined with other unfavorable circumstances, must be very unhealthy. Advisers of Mehemed Ali repeated the remark, and the vice-roy, who was a tyrant, but seldom shrinking from the extent of an enterprise, took the bold resolution of carrying down a large portion of the earthy hills into the lowest fields, which, after having sufficiently elevated, he intended to water artificially

and to convert into beautiful gardens. As once the Pharaohs dragged thousands of men to the erection of temples and pyramids, so Mehemed Ali forced thousands of fellahs (Egyptian peasants) to execute his gigantic plan.

Many died under the excessive labor, but the ranks were filled by others, and the work itself was always advancing. Thus a long chain of hills was carried down and miasmatic fields converted into charming olive and fruit gardens. And as the work progressed, the health of Cairo improved. Already in 1843, but a few cases of Plague occurred; and the disease, no longer brought from Egypt to other parts of the Turkish Empire, disappeared. At the end of the year 1844, while in Egypt, I could find no plague, and only a few cases of slight swelling of the lymphatic glands. I was assured that the disease would certainly reappear in the beginning of 1845; and going to the southern parts of the country, I expected, at my return to Cairo, to find it; yet since that time there has been no return of it. All this shows, conclusively, that Egypt was the real seat of the pestilence; and that not the whole country, but this encircled spot, at the beginning of the Delta, generated this dreadful disease. Its disappearance, after the falling of the Nucta and the entrance of the summer-heat, is also easily to be understood, if we observe the natural phenomena. The falling dew purifies the air, and the excessive heat immediately following, dries up all the vapors and all putrid matter, scorching over dead bodies and rapidly converting decaying matter into a mere powder.

Yet I do not mean to say that this or a similar epidemic might not, under favorable circumstances, find its origin also in other southern countries, chiefly where war is raging, where food is scarce, where swamps abound, or swarms of dying locusts and other impurities poison the air; but I assert, man has it always in his power to prevent the disease. War and uncleanliness can be avoided, food can be provided by wise measures taken in time, swamps can be drained, the locusts can be buried in the earth, thus doubling the fertility of the soil. Mehemed Ali has proved what can be done even under the most unfavorable circumstances, by his grand and energetic measures in improving the health of one city; and by thus destroying the germ of this most

destructive of all diseases, he has unconsciously saved the lives of millions.

May the extirpation of the Plague contribute to extend the application of the great principle, that the best remedy for diseases and for all other evils, is their prevention rather than their cure.

On the use of the Ammonio-tartrate of Iron. By WILLIAM GRIES, M. D., of Reading, Pennsylvania.

In August, 1851, I received under my care a delicate little girl, 3 years of age, affected with erysipelas over the left hip. She had been, during a year before, very thin in flesh, pale, and much troubled with uneasiness in her bladder, attended with sabulous phosphatic deposit in her urine. When I was requested to attend her for the erysipelas, I found her with high fever and very prostrate. I gave her purgative medicines to correct the secretions of the digestive organs, and soon commenced giving her a solution of ammon. tart. of iron, in 2 gr. doses, every three hours. I had for a long time before this treated erysipelas with sulph. quinia administered freely after mercurial purgatives, and alkaline salts to restore or correct the various secretions. In this case I was prevented from giving the quinia on account of the difficulty there was in giving her any medicine. The comparatively pleasant taste of this preparation was its first recommendation to give it in this case as a tonic, and her previous state of system I thought strongly indicated the use of iron. The duration of the disease was from the 25th of August to the 8th of September. It spread over the whole body, from the left hip down to the foot, and up to the scalp, and thence extended over the whole of the right side. On the parts first invaded it produced vesication, but after twenty-four hours use of the iron I found the extension of the inflammation less and less severe, so that, at last, it was a mere slight erythema. Besides the iron I used no medicine internally, except an occasional small dose of hydrarg. c. c. To prevent the parents from resorting to any external application, I applied, very thinly, tinct. iodine of half the officinal strength. I thought that it might do some good as a counter-stimulant, and not act as a repellent, which I have a terror of, from former sad experience,

of which I shall say something in the sequel. As every one knows, erysipelas is a disease of the whole system, and its external manifestation is only the elimination of the poison from the body. My little patient has since enjoyed excellent health, free from every symptom of her former complaint.

On the 31st January, 1852, I received part 24th of Braithwait's Retrospect, in which I found a statement of the remarkable success obtained by G. Hamilton Bell, Esq., in the treatment of erysipelas by the use of the muriated tinct. of iron. When I compared this account with my case, stated above, and considered the favorable report of M. Velpeau, on the local treatment of the disease by sulphate of iron, I concluded that it was the iron introduced into the circulation that was of benefit. Notwithstanding this opinion, when, in February following, I took charge of a severe case of the disease, in a robust man about forty years of age—from the authority above mentioned—I commenced the treatment with the mur. tinct. of iron, but I soon found that my patient could not bear the use of it, in sufficient quantity. It produced a severe burning sensation in his stomach and bowels, attended with vomiting and purging; I therefore substituted the amm. tart. of iron, in 4 gr. doses, every two hours, and soon found so much improvement as to encourage me to continue it, and my patient was soon restored.

Since then I have had the opportunity of using the remedy in this disease very extensively, and always with success, except in two cases of infants within the second week of their birth.

In the latter part of the winter, and in the spring of 1853, I had under my care many cases of typhoid fever, and in every instance I found more or less of inflammation of the pharynx, simulating erysipelas: this I treated, locally, with lunar caustic. I lost two of my patients; and these in consequence of the pharyngitis extending down the œsophagus, producing dysphagia.

Reflecting on the remarkable success I had in the treatment of erysipelas, with the iron, I determined, thereafter, if any case of typhoid fever presented itself with erysipelas, I would give an early trial to this remedy.

It appeared to me that there was sufficient similitude between the two diseases, taking into account the general symptoms, and the peculiar local affection of the glands, in typhoid fever, (I do

not pretend to say there is an identity) to warrant the use of it. The proximate principles of its composition are constituents of the body, in its healthy state, and therefore not poisons to it, as some of the prominent remedies recommended, such as superacetate of lead, sulphate of copper or nitrate of silver.

I have searched much for authority to use the iron according to my views, but could find nothing but warning, against the use of it in any disease where there were remains of inflammation in the stomach and bowels, and this is the condition in typhoid fever. When our old treatises on Materia Medica were written, the ordinary preparations of iron in use were the carbonate, the muriated tinct. and the sulphate; the first is objectionable on account of its bulk and its earthy parts, and the two latter are caustic irritants; whence these warnings; and later writers have generally copied these. The ammon. tart. is perfectly soluble, of little taste or irritating properties.

When I reflect that mineral solutions are the chief remedies in inflammation (when the acute stage is passed) of the mucous membrane, wherever we can reach it—in the eye, mouth, vagina, urethra, &c.—I feel a confidence that they may be applied to the same membrane in the stomach and bowels, under the same circumstances, when the articles are of such a nature that we rather desire than dread their absorption.

Since the latter part of last April, a considerable number of cases of typhoid fever have come under my care, generally of a mild character; and one of the first was a robust man about 40 years of age, a carpenter by trade. It came on in such an insidious manner that he thought it was "only a cold," and that he could work it off by taking some patent purgative pills, and continuing at his trade. I was not called till about the tenth day of the disease, when I found him very prostrate. I gave him dilute sulphuric acid, occasionally a dose of blue pill, and ordered ale and porter to be used pretty freely; but in a few days he got an aversion to these drinks, and I substituted brandy and water with sulph. quinia, but neither seemed to agree with him; then I carried out my theorizing, and withheld all other medicines, and commenced with the iron, four grains every four hours; in 48 hours I found such a marked improvement that I felt warranted to persevere. Moreover, my patient expressed

himself, decidedly, that this medicine did him more good than any that he had taken. I have, since then, applied it in every case, after using some mercurial purgative of a mild character and dose, and the dilute sulph. acid, until the pungent dry heat of the skin had somewhat abated, although the tongue was furred and dry. Where there was marked epigastric tenderness I first had leeches or cups applied, followed afterwards, during the use of the iron, by poultices sprinkled with spirits of turpentine.

Among all the cases presented to me this season, only two had any thing of external erysipelas, and one of these was in the hands of another practitioner for some time, with severe phlegmonous erysipelatous inflammation of the left wrist and hand, the result, as was supposed, of a puncture of a needle at the wrist, part of which had broken off and remained imbedded. When I saw the case I felt persuaded that it was idiopathic typhoid fever, and that this state of the system determined the unhealthy character of the inflammation. The hand looked nearly gangrenous; it had been lanced at three different places, and I opened a deep seated abcess on the back of the hand, which discharged ichorous pus freely. We agreed to apply to it a poultice of linseed meal and brewer's yeast, and to give the iron internally. The general health and the local affection soon improved, and the patient recovered rapidly.

My own conviction is, that all my typhoid fever patients convalesced and recovered much more pleasantly and rapidly than under any other treatment that I had ever pursued before. Its ordinary effect upon the bowels is to constipate, but it has appeared to me, that in this fever, where there is a tympanitic condition of the bowels, it purges at first; and this, I believe, is in consequence of its tonic effect upon their structure, for the tympanitis disappears with the purging.

In 1837, between the 26th of January and the 13th of April, I had in one family five patients with typhoid fever. First, the father and son were taken; then another son; then a hired girl; and, at last, the mother, who had attended on all the others. The four first all recovered, but the last died on the eleventh day of her sickness. (I write from memory and my account book.) A few days after the invasion of her disease erysipelas appeared on one side of her face, to which I applied a solution of bichloride

of mercury, two grains to the ounce of water; in twenty-four hours the inflammation had receded from the face and fixed on the pharynx and posterior nares; I applied an epispastic on the back of the neck, but the inflammation extended through the whole of the cavities of the nose, and, as I had sufficient cause to believe, into the ethmoidal and sphenoidal cells, accompanied with such a profuse flow of irritating mucus from the posterior nares as frequently threatened to strangle her. The inflammation extended to the membranes of the brain, followed by convulsions and death. This determined m *never to use repellents in erysipelas.*

Since I have commenced the use of this preparation of iron, I have cured, with it alone, two severe cases of chorea; one, a girl of 11 years, and the other of 13 years. I have used it also in several cases of disease of the joints, with marked benefit, and in diseases of females, such as chlorosis, neuralgia, and all cases of debility, preferring it to all other tonics, in a general way. In order to make some estimate of the extent of my use of it, I may state, that I have used at least eight pounds in my practice alone; and my practice is not very extensive, for on account of my own bodily infirmities I have to refuse many calls.

In a few cases of intermittent fever I have given it to prevent relapses, and to all appearance with benefit. Though of this I would not speak very positively, because I have, during this period, not had many cases to treat.

My mode of administering it is dissolved in water, either simple or aromatic; ordinarily I use cinnamon water, where not contra-indicated. It makes a perfect solution, having all the physical properties desirable in a medicine. Others may find other preparations of iron equally applicable and effective; I will not dispute with them. I have occasionally, but very seldom, combined with this solution chloric ether, hydrocyanic acid, tincture hyoscyamus, &c., chiefly in severe hysteria.

I have repeatedly mentioned my use of this remedy before our County Medical Society, but I am not aware that more than one of our members has used it, and his experience fully corroborates mine, as far as it goes. I have no doubt that if it had the prestige of some professor's name to commend it, it would have attracted more attention.

I feel persuaded that more than one, reading this, will exclaim, "Riding his hobby to death." I will not be offended with him, for, I fear, I should do the same under similar circumstances. Who has not his hobby? It must be he that cannot ride at all.

Case of Extensive Comminuted Fracture of the Cranium, with Recovery. By H. P. C. Wilson, M. D., Physician to the Baltimore City and County Alms House.

We present the following case to the profession as one of peculiar interest. A boy, 8 years old, falls head foremost upon the pavement from the third story window of a house. The whole back part of the cranium is fractured and driven in upon the brain. Two inches square of bone are removed. The other fractured and depressed portions are accurately adapted, and the boy is well in four weeks from the receipt of injury. It is instructive in the lesson of the great amount of injury that may be received by the head and yet recovery follow; and as teaching a guarded prognosis in even the most desperate cases. It is no less instructive in the intimate relation between incipient ptyalism and returning consciousness. Whether it was post hoc and propter hoc I shall not attempt to say. The patient was treated actively with mercurials, and the result was most happy.

G. L., step-son of Mr. N., Saratoga street, Baltimore, aged eight years; health good, of robust constitution. Was called to see him May 31st, at 9 o'clock in the evening. Had just fallen from the third story window of a house upon the pavement.

I found him lying upon a sofa, icy cold, pulse rarely perceptible and intermittent, respiration slow, stertorous and irregular, pupils well dilated and unimpressible to light, perfectly insensible to all external impressions; has occasional emesis.—Examining the cranium, found fracture. No external wound except a small scratch. Back of the head completely flattened, the result of the blow.

I proceeded at once to cut down on what appeared to be the centre of fracture, which was about the point of union between the upper angle of the occipital and two parietal bones. I made a horizontal incision around the head, six inches in length, and another at right angles to the first, five inches; dissected back

the flaps, and laid bare a comminuted fracture of the cranium, with the fractured portions driven in upon the brain. Dividing the periosteum, I removed two segments of bone, either of which was about one inch square. Four main fractures proceeded from this central point. One upwards and forwards across each parietal bone to about the parietal protuberance, (from either of which branched off several smaller fractures,) and two running downwards on either side of the middle line of the occipital bone, parallel to each other, and extending apparently to the foramen magnum. I did not venture to trace the whole extent of these fractures. The segment of bone dividing them was perfectly loose, so that seizing the upper extremity I was enabled to move it backwards and forwards with ease; but as it did not press upon the brain I desisted from any attempts to gratify curiosity, as to the extent of these fractures and the size of this segment. After removing the two pieces of bone mentioned above, I succeeded, without much difficulty, in inserting a loop under the remaining portions of the cranium pressing upon the brain, and with my finger as a fulcrum, dilated them and relieved their pressure. With the handle of my scalpel I removed all the accessible coagulated blood upon the dura mater, (this membrane being nowhere ruptured). I then drew the four flaps together at the point of intersection of the two incisions by two sutures, and applied no other dressings than a folded cloth dipped in cold water, and held in position by a bandage, thus allowing the incisions to pass freely, and give exit to any discharges that might be poured out from the seat of injury.

He was then removed to bed; hot water in bottles applied to his feet and body, and a little brandy administered from time to time. Reaction came on; pulse better; respiration easier. I left him for the night, with instructions that the dressings to his head should be kept wet with cold water: the brandy and bottles of hot water to be used or withheld, as the surface became cold or hot.

June 1*st*.—I am told this morning that our patient has spoken, and called persons by name, previous to my arrival. I find him however perfectly insensible, without any ability to be aroused. Pulse 120, small and quick; skin pleasantly warm; respiration easy; pupils dilated and unimpressible to light. Ordered hyd.

protochlo. grs. ij; potas. nitrat. grs. iv; pulv. ipecac. gr. ¼ ter die; as an antiphlogistic, and also as a sorbefacient to the bloody coagula upon the brain. To be fed with ice, which he took with great avidity. Head dressings to be undisturbed, and kept wet with cold water. Six o'clock P. M.—About as in the morning. Powders had given several alvine evacuations and vomited once; were discontinued, and friction with mercurial ointment substituted.

June 2d.—Still lying in a stupor, as if in a profound sleep. Pulse fuller and stronger, and 120. Ordered hyd. protochlo. grs. ij; potas. nitrat. grs. iv; acet. plumbi gr. ½, ter die. Dressings removed for the first time. Nothing of note about the wound. Similar dressings reapplied, and same treatment continued.

June 3d.—Still in a stupor. Has shown no evidence of sensibility or consciousness of things around him since the morning after receiving the injury, and then it was only imperfect and temporary; but a flash of intelligence. To-day, however, I observe that his pupils, which have been uninterruptedly dilated, and without any impressibility to light, show evidences of contraction on passing a bright light before the eyes. Other symptoms unaltered; treatment unchanged; dressings undisturbed.

June 4th.—Pupils contracted and dilated freely under the influence of the presence or absence of light. Spoke on strongly arousing his attention, but at once relapsed into a comatose state, until another strong impression was made upon him. No evidences of inflammatory action about the wound. Water dressings re-applied and same treatment continued.

June 5th.—Found G. L. with his eyes open, taking notice of things around him. Answered when spoken to, and asked for what he wanted. Was lying very much as a child who is weary. Pulse 100, full but soft. Wound looks pale. No granulations thrown out, and no union taken place. Allowed crackers and tea and gave castor oil ʒij. Previous treatment continued.

June 6th.—Still improving. Mind perfectly clear and evinces great intelligence. Playing with things around him. Is anxious for food. Complains, however, of sore mouth. Submaxillary glands a little tender, and increased secretion of saliva. Is slightly ptyalized. Has been taking calomel grs. ij. ter die, and

using inunctions of mercurial ointment since the day after injury. Powders stopped, and the oil of yesterday, not acting, was repeated to-day. Is allowed some ice-cream, tea, toast and crackers. Solution of borate of soda, as a mouth wash. Wound looks pale and sickly. Stopped water dressings and applied a mutton-tallowed cloth and bandage. The cranium is seen bare through the gaping incisions.

June 7th.—Wound looks more healthy. Pulse good and 100. Shows much playfulness. Oil acted well. Is allowed soup, a soft-boiled egg, ice-cream, bread and tea. Other treatment unchanged.

June 15th.—Two weeks after the receipt of injury. A daily report has been omitted, because since June 7th the case has presented no symptoms worthy of note, and the treatment has been unchanged. Our patient has been going on steadily to improve. Is allowed a full nutritious diet. Wound dressed twice daily as heretofore. A good portion of it has healed by granulations, which are every where rapidly closing over the denuded bone. He is dressed and amusing himself with his playthings about the room.

June 22d.—Three weeks after injury. Is running about the house. Two arms of the crucial incision healed. Cranium visible but at one point, and here barely perceptible. Every where else covered by granulations. Has been on no treatment since 15th, except to dress head once daily as heretofore.

June 29th.—Four weeks after injury. Is no longer confined to the house. Meets me to-day on the pavement. Wound covered with cuticle, except a couple of small spots. Granulations being a little exuberant at these points, are touched with sulphat. cupri., and my patient discharged.

July 26th.—Saw G. L. on the street. Is perfectly well, with nothing to tell of his imminent peril and frightful injury but a firmly united cicatrix.

Baltimore, August 8th, 1855.

Case of Induction of Labor at the Seventh Month, by the Water Douche. By ANDREW CHEESEMAN, M. D.

In the month of November, 1853, I attended Mrs. L., residing in Kates street, in her first confinement. There was contraction at the inferior strait; the transverse diameter being 2 inches. After a severe labor of 48 hours the head was perforated and with considerable difficulty a large child was extracted. Vaginitis, supervened and her recovery was tedious. Being informed of her unfortunate condition, she promised if again pregnant, to give me early intimation of the fact; and accordingly in June last told me that her last menstrual period terminated on the 5th of January, and she had quickened in the last week in April. With her consent I determined to induce premature labor and to adopt the method of Prof. Kiwisch, of Wurtzburg.

August 10th, 4 o'clock, P. M.—Touched and found the os high up and undilated. Placing a bucket about four feet above the bed on which the patient lay, by means of a few feet of india rubber tubing, terminating in a nozzle, and used as a syphon, I directed a small stream of tepid water on the os uteri for 20 minutes, using in that time six gallons of water. She complained of no pain or uneasiness, and on examination I found no perceptible alteration in the parts.

August 11th, 9 o'clock, A. M.—I found, to my surprise, that my patient was in labor, the pains having commenced at 7 o'clock this morning. On touching I found the os quite low down an inch and a half in diameter, and the membranes protruding strongly. Repeated the douche for 15 minutes.

11 o'olock, A. M.—Os uteri fully dilated. Membranes filling the vagina and reaching the vulva.

12 o'clock, M.—Membranes ruptured. Feet presenting with toes to the pubis and the cord prolapsed. The body was slowly delivered without difficulty, and the right arm and shoulder came out from under the pubic arch; but the left shoulder and arm caught behind a strong transverse band (a result, doubtless, of the vaginitis following the previous labor,) which extended from side to side of the pelvis across the lower part of the sacrum, firm and tense, with a sharp crescentic edge and fully three quarters of an inch broad at its middle. It was with some dif-

ficulty that I carried the arm over the face and brought it down, during which operation the child gasped strongly twice. The mouth and afterwards the nose caught on the same obstruction, and I was compelled to use the rectis in order to relieve and extract the head. The child was still born. The placenta followed in two or three minutes.

The chief points of interest in this case are the ease and promptness with which labor was induced, and the obstruction that impeded its progress. In all the cases I have seen noticed in the journals, the number of applications of the douche, and the time required to bring on the labor, was much greater than in this case; when the process commenced in 15 hours and terminated in 20 hours after the first application of the douche, and proceeded so far before the second application that it is doubtful whether more than the first was necessary. The unfortunate presence of the obstructing band, and the presentation of the feet, frustrated the chief end for which the labor was prematurely induced. Had the head presented, or with the feet presenting had there been no unusual impediment, I feel assured that the child would have survived the labor.

[The injection of water into the uterus, as a means of producing premature delivery, has been known, we have reason to believe, in this country for some time, though no cases that we are aware of have been recorded illustrative of its use. In a work, however, on Materia Medica, by Dr. J. B. BIDDLE, of this city, published in January, 1852, we find among the uses of *cold water* the following:—"Cold water, injected into the impregnated uterus, is among the most certain means of inducing premature delivery."—ED. EX.]

Creatine in the Urine.

By J. CHESTON MORRIS, M. D.

Though long acknowledged as a normal constituent of the urine, the first notice of creatine in pathological conditions appeared in the June No. of the Examiner, in a letter from Dr. Miltenberger of Baltimore to Dr. Neill of this city. That it should not have attracted earlier the attention of microscopists in urinary examinations, is easily accounted for by its ready

solubility and the small proportion in which it exists. Liebig thought that the substances taken for lactic acid in the urine were in reality creatine and creatinine, (which differs mainly from the former in containing two equivalents less of water, and in its greater solubility,) and estimated them as constituting about 0.15 per cent. of normal urine—nearly equal to the quantity of uric acid. Like urea and uric acid, creatine is probably derived from the decomposition of muscular tissue: it is readily obtained from the juice of muscles, and has been detected in the blood by Robin and Verdeil. In cases therefore of muscular waste, nothing is more reasonable than to expect to find it in the urine. As it is soluble in 70 parts of cold and much less of boiling water, we cannot expect to meet with it deposited in fresh urine; but in evaporated urine I think I have met with it. In looking for it, the edges and corners of the cover-glass should be carefully examined, and, as Dr. Miltenberger suggests, after the specimen has been prepared for a day or two. The crystals are remarkably permanent, and correspond closely to the figures of creatine given in Funke's Atlas of Physiological Chemistry. It has been suggested that they might prove to have been cholesterin, or chloride of sodium; but their shape and appearance preclude the former doubt, while a drop of a solution of nitrate of silver instantly decides the latter. A granular brown matter takes the place of the crystals of chloride of sodium, while creatine remains nearly unaffected.

In recently examining the urine of B. P., a blacksmith, aged about 45, I found, after two days, crystals similar to those found by Dr. Miltenberger, (of which he has kindly furnished me a specimen,) situated in the position I have mentioned, viz., at the edge of the cover-glass. This man has suffered under the phosphatic diathesis for nearly three years, but has been relieved by the use of alkaline diluents. In this case we may, I think, attribute the presence of creatine to the incessant draught made upon his muscular system by his occupation.

We need more light on this subject from general experience, however, before any sound views of its pathology can be developed, or rational plan of treatment be deduced.

Philada., Aug. 11*th*, 1855.

Meteorology—Mason's Hygrometer.

By James A. Kirkpatrick, A. M.

The *Force of Vapor*, *Relative Humidity*, and *Dew Point*, may all be calculated from the indications of Mason's Hygrometer. This simple and convenient instrument consists of two thermometers whose indications agree perfectly, when they are both dry. One of the thermometer bulbs, however, is kept wet, by a piece of thin muslin, the end of which dips into a fountain of water, similar in construction to the fountains attached to bird-cages. This permanent fountain constitutes the principal difference between Mason's Hygrometer and August's Psychrometer. The water evaporating from the moistened bulb, lowers its temperature, in proportion to the rapidity of its evaporation, and thus gives the means of obtaining the most important results.

From experiments carefully made, it has long been ascertained that the vapor of water, filling any space to saturation, exerts a certain expansive force, pressure, or tension, which varies with the temperature of the air. This is called the Maximum Tension or Elastic Force of Vapor of Water, for that particular temperature. For instance, it has been found that for 3°.2, F., the Maximum Tension or Force of Vapor is equal to $\frac{1}{20}$ of an inch of mercury; for 18°. 3, to $\frac{1}{10}$ of an inch; for 32° to $\frac{18}{100}$ of an inch; for $40\frac{1}{4}$° to $\frac{1}{4}$ of an inch; for 59° to $\frac{1}{2}$ an inch; for 79°.3 to 1 inch; and for 101°.4 to 2 inches of mercury, &c. From these experiments a table of the Maximum Tension, or Elastic Force of Vapor, has been constructed by Regnault, and published by the Smithsonian Institution, but in French measures,—that is, the temperature is expressed in Centigrade degrees, and the height of the mercurial column in millimetres. I find, however, that Prof. Boye in his small but valuable treatise on Pneumatics, lately published, has converted these French measures into English inches and Fahrenheit degrees. With the use of this table, and the following formulæ, the Force of Vapor existing in the atmosphere, the Relative Humidity and the Dew Point, quantities always interesting to the meteorologist, may be easily and accurately calculated.

Let t, represent the temperature of the air in Fahr. degrees, as indicated by the dry-bulb thermometer.

t', the temperature indicated by the wet-bulb thermometer.

f, the Force of Vapor in the atmosphere at the time of observation;

f', the Maximum Tension in inches of mercury, for the temperature (t') of the wet-bulb thermometer, as exhibited in the table;

f'', the Maximum Tension for the temperature (t) of the dry-bulb thermometer;

d, the Dew Point, at the time of observation;

h, the Relative Humidity; and

b, the height of the mercury in the Barometer in English inches. Then

To find the Force of Vapor.

$$f = f' - \frac{0.480\,(t-t')}{1130-t'}\,b.$$

If, however, the temperature is below the freezing point, and the wet bulb is covered with a film of ice the formula becomes

$$f = f' - \frac{0.480\,(t-t')}{1272.2-t'}\,b.$$

By *Relative Humidity* we mean the proportion which the Vapor of Water, existing in the atmosphere, bears to the maximum quantity, or the quantity necessary for saturation at the existing temperature. That is, a Relative Humidity of .55, means, that the atmosphere contains $\frac{55}{100}$ of the quantity of vapor which, at the existing temperature, is necessary to saturation.

To find the Relative Humidity.

$$h = \frac{f}{f''}.$$

To find the Dew Point.—As the force of vapor in the atmosphere, at the existing temperature, must be the same as the maximum force corresponding to its dew point, or *the tempera-*

ture at which vapors begin to condense like dew, on any cold surface, it follows that the degrees of temperature in the table of Maximum Tension corresponding to the force of vapor (f) in the atmosphere, will be the Dew Point. It is in this way that the Dew Point has been calculated for the Medical Examiner for the last two months.

To illustrate these formulæ, let the dry bulb be 85°, the wet bulb 74°, and the barometric pressure 30.0 inches; then

$$f = 0.8390 - \left(\frac{0.480 \times 11}{1130 - 74} \right) \times 30.0 = 0.839 - 0.150 = 0.689 =$$

force of Vapor in the atmosphere.

$$h = \frac{f}{f'} = \frac{0.689}{1.2030} = 0.57 = \text{Relative Humidity.}$$

Then d = the temperature corresponding to f in the table which is found by inspection to be 68°.2.

Considerable care is necessary in the use of this Hygrometer. It should be fixed permanently in the shade, in the open air, protected from rain, and from reflected heat. When the temperature is near the freezing point, some difficulty arises from the uncertainty in the freezing of the water on the bulb, but this seldom happens, and may be remedied by more careful observation. The water with which the fountain is filled, should be pure rain water, or water that has been boiled. The muslin covering the wet bulb should be cleaned whenever any impurities appear upon it, and renewed at least four times a year.

Central High School, Philadelphia, July, 1855.

BIBLIOGRAPHICAL NOTICES.

Clinical Lectures on the Diseases of Women and Children. By Gunning S. Bedford, A. M., M. D., Professor of Obstetrics, the Diseases of Women and Children, and Clinical Midwifery in the University of New York. New York: 1855.

This work consists of a series of Clinical Lectures, or rather, "running commentaries upon disease," delivered from the obstetric chair of the University of New York, and originally re-

ported by several medical gentlemen for the American Lancet, in which journal most of them have been published. The objects and scope of the book are told in the following paragraph concerning the establishment of an Obstetric Clinic:

"It was with the hope of affording you an opportunity of studying the various maladies of the female practically, and also the diseases of children, that I embarked in the enterprise of establishing an *Obstetric Clinique,* which would enable me to bring before you the most interesting of these affections, and discuss in detail their nature, causes, symptoms, complications and treatment." (Page 8.)

In their present collected form, these Lectures constitute a handsome 8vo. volume of 563 pages, a sort of Clinical Hand-Book of Obstetricy, in which the student and the junior members of the profession generally, will find much that is interesting and practically instructive.

"If you will take a retrospect of the last few weeks, you will find, on recurring to your note books, that numerous cases of every day occurrence, the very character of cases which you are most in need of, because they constitute the every day work of professional life, have been brought before you. Their causes, symptoms, diagnosis, pathology, complications and treatment have been fully discussed. These cases, after being prescribed for, have returned, and you have been the witnesses as to the result of the treatment; you have seen whether our views have been sound and worthy of thought, or whether they have been speculative, and, like most hypothetical doctrines, apocryphal, and, therefore, unsafe as guides in the practice of the healing art." (Page 73.)

The typography and general appearance are excellent. With regard to the title—*Obstetric Clinique*—we would simply remark that consistency demands that it be written, in one of two ways, either *Clinique Obstetrique*, or Obstetric Clinic.

The eminently practical ideas of the author, clothed in simple and perspicuous language, are delivered in quite an attractive, affable and off-hand manner. We regret to perceive, however, that this pleasant style is marred by a certain occasional colloquiality, which, notwithstanding the prefatory disclaimer of Prof. B., cannot but be regarded as objectionable by the judicious and time-valuing reader. This very feature, which of late has been obtruding itself somewhat too much in our medical literature, renders it difficult to assign to the work under consideration its true literary and scientific rank. For so far as it is colloquial, it is popularized, and therefore loses that strictly professional

character which every work emanating from an authoritative source should possess. Moreover, professional books, whose construction is such as to attract both the popular and the scientific eye, seldom succeed in acquiring permanence. They form a sort of hybrid literature, which, like its prototypes in nature, the hybrid races of animals and men, ultimately die out and leave no mark. But a still more serious objection is implied in the quaint expression of an old English writer, "*ye bookes be ye roades unto knowledge.*" The shorter these "roades" the better; the more clear, simple and concise the language of a writer, the more rapidly and satisfactorily do we acquire his ideas. Time is thus saved, and time is momently becoming of more value as the demand upon its use increases. With the widely-spread, and in many instances illy-digested literature of a comprehensive profession before him, the student cannot afford to lose the little time at his disposal in searching through many pages for a single item of positive knowledge, which, when found, may oftentimes, like Gratiano's reasons, be not worth the search. The active practitioner, whose busy carriage allows him no rest through the long day, "in silence and at night" endeavors to meet and grapple with the responsible and arduous duties of his vocation, by seeking that knowledge, which to him is indeed power. Such an one turns instinctively to the author who, in the fewest words, gives him the best and most reliable information. The lofty thoughts of England's great poet find their expression in brief and simple terms. Who does not know that this is the secret of Shakespeare's greatness. We speak advisedly on this subject, for in so doing, we utter the sentiments of many whose daily path lies through and among books, and who are often compelled to exclaim, that "big books are great evils." Certainly verbosity is highly reprehensible in a scientific treatise.

These "Clinical Lectures," 30 in number, and comprehending the details of over 200 cases of disease, may be regarded as so many disconnected or isolated chapters upon the theory and practice of obstetric medicine. Their want of connection or relationship is manifestly due to the author's desire of rendering the volume what it no doubt is, a faithful representative of his clinic as it occurred before the class of the University of New York.

In the first Lecture, the reader will find some excellent remarks on organic and functional diseases of the uterus; their rank and importance in the nosological scale; the crude ideas entertained with regard to them by the ancients, even by Hippocrates and his school; and the comparatively recent origin of our knowledge concerning their pathology and therapeutical indications. The circumstances which modify these affections, and the causes of their apparent infrequency in former times, are also discussed briefly and to the point. In this latter connection the author makes some very practical and judicious observations upon female hygiene. The latter part of this lecture is taken up with the examination and treatment of the following cases of disease, viz: profuse menstruation from debility; acute external otitis; gonorrhœal ophthalmia; suppression of the menses from cold; and infantile pertussis.

An examination of the cases composing any one of these lectures is sufficient to show the disadvantageous character of the clinical system of teaching as at present in vogue in our medical schools. In one or two hours, at the most, numerous cases of disease, differing from each other in the most marked manner, are passed in rapid review before an audience of young men, the majority of whom have assembled for the first time, perhaps, to look disease in the face and study its protean history. This panoramic method of displaying disease is by no means calculated to assist the student in the acquisition of clear and philosophical notions concerning etiology, diagnosis, therapeutics and the like. In the effort to make the collegiate clinic varied and attractive, accuracy and extent of knowledge are too often sacrificed to mere superficial examinations, which latter must ultimately lead to routineism and all its attendant evils. We are of the opinion that these disadvantages could easily be obviated by occupying the clinical hour with a series of closely allied diseases; or better still, with one particular disease accompanied by cases illustrative of its various modifications.

Examples of chlorosis, muco-purulent vaginal discharge, pruritus pudendi, amenorrhœa, the effects of undue lactation, and scarlatinous albuminuria, make up the second Lecture. The remarks upon chlorosis are every way judicious, and such as every practical physician must concur in. It is an extremely

interesting affection, and one which deserves close attention and study on account of the obscurity of its origin and primary cause. The few hasty observations at the close of the lecture upon the connection between albuminous urine on the one hand, and arrest of the cutaneous function, followed by renal congestion on the other, are as just in philosophy as they are valuable in practice.

Among the cases treated of in the third Lecture, the remarks on uterine hydatids and concealed pregnancy particularly recommend themselves to the practical physician. The reader, we are sure, will peruse with interest the graphic description of a case of fibrous tumor simulating pregnancy; not only on account of its surgical and obstetrical importance, but also on account of the important and delicate interests often involved in such cases. The narration of such a case constitutes one chapter at least in the unwritten but daily and anxiously acted history of medical experience and responsibility. Such cases show in a clear light the status which the physician occupies in society, and the extent and grandeur of his relations to his fellow creatures.

In Lecture fourth, we have a dissertation upon vaginal discharges, intestinal worms, ulcerative carcinoma of the cervix uteri, &c., with a brief exposé of human credulity and the system of quackery as that hydra-headed monster appears in New York.

Our limits forbid any other than a very hasty glance at the contents of the remaining lectures of the "Obstetric Clinique."

The 5th, 6th, 7th and 8th lectures present nothing of especial interest, except, perhaps, some remarks on the causes, symptoms, diagnosis and treatment of ulcerations of the cervix uteri. In Lecture IX. the subject of uterine diseases is continued. Near the close of it, will be found a case of suppressio mensium following an attack of scurvy. In Lecture X. the most interesting cases are two of steatomatous and sarcomatous tumors, both containing hair. In the 12th Lecture, among a variety of other matter, Dr. B., takes occasion to combat the general custom of applying two ligatures to the umbilical cord. He makes use of but one, because, 1st, "the small quantity of blood which flows from the untied extremity of the cord, consists merely of the disgorgement of the vessels on the fœtal portion of the placenta, and does not come directly from the system of the mother. 2d,

This very disgorgement, in my opinion, assists in the more prompt expulsion of the after-birth." (p. 200.) Lecture XIII. presents us with some cases of menstrual disease, fibrous tumor of the uterus and ovarian tumors, with observations on the diagnosis of the latter, and the use of the uterine sound. The reader will also find here reported a case of incipient paralysis of the inferior extremities, dependant upon defective menstruation. Lecture XIV. introduces us to the physical and moral changes which the female economy undergoes at the epoch of puberty; several pages are devoted to the time of commencement of the menstrual flux, its source, causes, symptoms and periodicity. In the 15th Lecture, the obstetric surgeon, the medical jurist and the philanthropist will alike find food for reflection. A detailed account is here given of two cases of imperforate os tincæ, accompanied with retention of the menses; this retention producing so much abdominal swelling in one, as to be mistaken for pregnancy. In both patients the os was perforated by means of a curved trocar, and egress given to about two quarts of menstrual blood, with the effect of affording speedy relief from suffering. Then follows the history of a "case of imperforate os tincæ in a pregnant woman, the result of injuries to the neck of the uterus from repeated attempts at abortion, and on whom was performed the operation of vaginal-hysterotomy, with safety to both mother and child." The increasing frequency of criminal attempts at abortion, the undisguised boldness and utter recklessness of life with which these attempts are often pursued, and the necessarily dangerous and at times fatal effects which follow, are evidenced in a case detailed by Dr. B., for which we refer our readers to page 255.

An example of procidentia vesicæ will be found in Lecture XVI. Lecture XVII. opens with some general observations upon the diseases of infancy, their importance and fatality, and the anatomical and physiological peculiarities of the infant. Passing over the next two we find in Lecture XX. a case of trismus nascentium, a disease whose pathology is still very obscure, notwithstanding the investigations of Clark, Holland, Sims and others. With regard to the treatment of this affection we may here observe, that in two very well marked cases we have witnessed decided benefit from the combined use of belladonna and

iodide of potassium. Lectures XXI. to XXV. inclusive, contain the details of some fifty cases, which though of almost daily occurrence, present features of more or less interest. Lectures XXVI., XXVII. and XXVIII. are mainly taken up with observations on infantile hygiene, therapeutics, &c. Lecture XXIX. we regard as the most interesting of the entire series. It is in reality a short essay upon uræmia, one of the most important varieties of toxæmia or blood poisoning, and one, moreover, which amply illustrates the indebtedness of therapeutics and practical medicine to the untiring and philosophical investigations of the physiological chemist. Much attention has recently been directed to this subject in consequence of the doubts created by the experiments of Frerichs and others, concerning the poisonous nature of urea. Although this substance has been known as a healthy ingredient of the urine for nearly 100 years, and although it has been carefully studied by many skilful chemists, yet its origin and its influence upon the economy, especially the nervous centres, when retained in unusual quantities in the mass of blood, are still mooted points. The opinion has very generally prevailed that the accumulation of urea in the blood is sufficient to produce coma, convulsions and their attendant train of nervous phenomena. This view has been combatted from different experimental stand-points with much success. Segalas, Tiedemann, Mitscherlich, Gmelin, Cl. Bernard, Barreswill, Stannius, Frerichs and others have shown that the kidneys of living animals may be extirpated with but little subsequent disturbance of the nervous system. Again, Courten, Bichat, Gaspard, Vauquelin and others have repeatedly injected urea and urine into the veins, and in every instance failed to observe any convulsive movements. Lastly, Bright, Christison, Rees and Frerichs have in several instances detected large quantities of urea in the blood of man, without the slightest symptom of uræmic toxication. Both Vauquelin and Segalas have suggested the administration of urea as a diuretic. On the other hand, Frerichs claims to have demonstrated that in every case of uræmia a change of urea into the carbonate of ammonia takes place; and that the symptoms which characterize this disease can all be produced by the injection of carbonate of ammonia into the blood. In addition to his own numerous experiments,

he finds considerable support for these views in the experiments and observations of Orfila, Bernard and Barreswill, Lehmann, Christison, Jakchs, &c.

An interesting fact in this connection is the relation of albuminuria to uræmia. From the investigations of Robin, Tegart, Franz Simon and others, it appears that the presence of albumen in the urine is not necessarily followed by uræmia. Robin suggests that in the oxygenation of the albumen of the blood we are to look for the origin of urea. He thinks that where this oxygenation is to any extent interfered with, albuminuria sooner or later appears. But, the fact that albumen in the urine is sometimes accompanied by an increase of urea in the blood, militates strongly against this opinion. The origin of urea has long been a vexed question in chemico-physiological science. Lehmann, Frerichs, Bidder and Schmidt and their adherents, maintain that this compound is derived from the assimilated histoplastic or albuminous food on the one hand, and from the necessary disintegration and absorption of albuminous tissue during fasting on the other. It will be seen that the former is the interrupted, and the latter the continuous element in this double source. Liebig, Bischoff and others of that school contend that we are to seek for the formation of urea in the metamorphosis of the nitrogenized tissues alone.

The cause and semeiologic value of albumen in the urine are also matters of great interest and importance to the practical physician as well as to the student of physiology. Our author very properly objects to the view of Dr. Williams who considers albuminuria as the result of renal congestion alone. This pathological condition we have every reason to attribute to a highly complex cause. Peculiar alterations in the composition of the blood; organic and physiological changes in the kidney itself; compression of the renal veins, by the gravid uterus, tumors, &c., are all capable of producing albuminous urine.

After a few general remarks upon the nature of the secretory process, its importance as the grand eliminating agent, by which the blood is maintained in its normal condition, Dr. B. writes. We may suppose,

"That in most of the diseases which we have enumerated as being occasionally accompanied with albuminuria, such, for example, as cho-

lera, scarlatina, diabetes, &c., the constituents of the blood become changed by the introduction either of a poison or some other unusual substance. If this occur, it is quite manifest that the blood is no longer normal, and because of its altered condition, its elaboration in the kidney will also be modified. In other words, in lieu of the ordinary elements contained in the urine, we shall sometimes find albumen, an absence of urea, etc."

"Again, the blood is changed in pregnancy, various circumstances tending to this modification, viz., the formation of kiestine, the secretion of milk, the quantity of blood materials passing through the circulation of the fœtus, and the diseases of the embryo itself, not to speak of its excretions, some of which we know enter the blood of the mother. These, then, being so many influences capable of altering the constituents of the blood, will they not account, in some instances, for the occasional presence of albuminuria in the pregnant female?"

"I have no experiments to offer with the view of demonstrating that the menstrual blood positively contains noxious materials, but I argue the affirmative of this question from certain pathological states, which we observe to follow an abnormal condition of the catamenial function. For instance, in one hundred unmarried women who may labor under suppression of the menses from the operation of any of the influences known to produce this result, such as cold, mental emotion, etc., we will discover that in at least ninety-five the suppression will be followed by more or less disturbance of the nervous system. In some, it is true, the symptoms will be light and evanescent, but in others they will assume a more marked character, sometimes even producing mania, and at others coma, epilepsy, catalepsy, chorea, etc. May not these phenomena be due to a species of toxæmia traceable to the poison of the menstrual blood upon the nervous centers?

"This opinion seems to be confirmed by the important fact that all the nervous disturbances cease with the return of the function. I have enjoyed full opportunities for observing the effects on the system of the various forms of menstrual aberration; and I have also noticed an extremely interesting and significant circumstance—a circumstance which certainly tends to corroborate the hypothesis that the derangements of function are owing to a species of blood-poisoning. The circumstance to which I allude is this: when the catamenial discharge becomes suddenly or otherwise abnormally arrested, the urinary secretion is usually diminished in proportion to the intensity of the nervous symptoms—and what is still more significant is, that the nervous disturbance will yield in proportion to the effects of diuretic and sudorific remedies. There is no error as to the fact—its truth is readily susceptible of demonstration." (pp. 525-6-7.)

Of all the causes which operate in the production of albuminuria, obstruction of the renal circulation is perhaps the most common. The experiments and observations of Robinson, Meyer, Frerichs, Lee, Velpeau, Stokes, Cruveilhier, and many others,

show conclusively that obliteration of renal veins, whether by ligature or otherwise, is almost invariably followed by albuminous urine. "In gestation, and especially primiparæ, albuminuria is often caused by the pressure of the impregnated uterus on the renal vessels. In 106 multiparæ, Blot has found eleven women whose urine contained albumen, while in 99 primiparæ, thirty exhibited albuminuria. The proportions, therefore, for the former are as 1 to 10—the latter as 1 to 3." This difference is probably due to the fact that in first gestations the abdominal parietes being firmer and more resisting, the gravid uterus is pressed backwards against the blood-vessels with more force, while in multiparæ the walls of the abdomen are so relaxed as to allow the womb to gravitate forwards and thus prevent this pressure and subsequent congestion of the renal capillaries.

In the treatment of uræmia, a knowledge of the conditions influencing the amount of urea in the economy is obviously of the highest importance to the physician. The recent valuable contributions to this branch of urological science—the results mainly of the many careful and elaborate investigations of the German chemists—are worthy of very close attention, since without these guides it is impossible to institute a rational treatment of this disease. The amount of urea excreted from the system is influenced by the quantity of water used as drink, the kind and amount of food, accessory diet, certain inorganic matters taken in with the ingesta, exercise, medicine, certain diseased conditions of the body, &c. According to Bischoff, excessive water-drinking gives rise to a more rapid elimination of urea by the kidneys, in consequence of its increased disintegrating effects upon the nitrogenized tissues. The experiments of Böcker confirm this view, while those of Schmidt lead to a directly opposite result. Seigmund and Bischoff have both experimented upon the influence exerted by the quantity and quality of the food upon the metamorphosis of the nitrogenous tissues, and through this latter upon the amount of urea excreted in a certain time. They found that the formation and excretion of urea in a given time was directly related to the amount of azotized food digested in that time; and that the consumption of gelatinous matters increased, while the use of fats diminished the excretion of urea. The combined experiments of Heller, Böcker and Lehmann,

show very conclusively that the free use of tea, coffee, alcohol, &c., and those substances which are classed together, by systematic writers, under the head of "the accessory diet," is attended with diminished urea in the urine; while chloride of sodium, according to Bischoff, decidedly increases the quantity of urea excreted. Active exercise, wasting disease, many of the phlegmasia, as pneumonia, pleuritis, meningitis, acute tuberculosis, endocarditis, &c., all augment the formation and elimination of urea; while the chronic neuroses and most renal diseases diminish this compound. Attention is also beginning to be directed to the influence of medicinal agents upon the salts of the urine; and although the laborers in this field of research are but few in numbers, yet they have accomplished sufficient to justify very hopeful anticipations of the ultimate results. We can but allude to a few of the experiments upon the action of certain diuretic medicines. According to Prof. Krahmer, of Halle, the administration of colchicum and guaiacum, decidedly increases the amount of urea excreted in the urine. Böcker has quite recently shown that similar results follow the use of strongly concentrated phosphoric acid; while phosphate of soda produces a reverse effect. Laveran and Millon assert that Rochelle salt, in small doses, increases the amount of urea and diminishes that of uric acid. From his experiments upon rabbits, Siegmund has shown that the amount of urea is augmented by cubebs and the ethereal extract of cantharides. Lastly, Dr. Parkes claims the same effects for potash.

On page 534 of the volume before us, the reader will find the following conclusions, which, in the present state of physiological science, we have reasons for considering as fairly deducible from the above facts.

"1st. Uræmia is a nervous disturbance arising from a peculiar blood-poisoning.

"2d. Albuminuria is often connected with uræmia, but is not the cause of it.

"3d. Disease of the kidney will often produce albuminuria, but in a great many cases albuminuria exists without true disease of the gland, and as a consequence of an active, or a merely passive congestion, and it will also result from a variety of nervous disturbances.

"4th. If urea be a poison, the quantity of it which accumulates in the blood in cases of extirpation of the kidneys in animals, or in suppression of urine in man, is not sufficient to produce any manifest deleterious effect.

"5th. According to Frerichs, uræmia is merely a poisoning by the carbonate of ammonia, which is a product from the decomposition of urea.

"6th. The treatment of uræmia must consist in the free use of diuretics, sudorifics and purgatives, the most suitable diuretics for this purpose being colchicum and guaiacum."

The prominent topic in the last lecture (XXX.) is sterility, its causes, treatment, &c.

We have thus, in a hasty manner, laid before our readers a summary of the contents of the "obstetric clinique." One additional comment remains to be made. In numerous places throughout the work, the author shows very truthfully that physiology is a prominent and indispensable auxiliary in the formation of a rational, and therefore philosophical system, of therapeutics. And in most instances he is happily accurate in his application of the facts of physiological science to the details of the diagnosis and treatment of disease. Occasional errors in this respect, however, will be detected by the careful reader, errors which are perhaps justly attributable to the clinical system itself. For very certain it is that every part of the human fabric is so closely connected with all the rest, and all the functions, organic and animal, are so continuously interwoven with each other, that when the finger of disease touches an organ, a thorough and most scrutinizing examination is required in the majority of cases to separate the positive from the sympathetic symptoms, to avoid confounding effects with causes, and lastly to point out the *fons et origo mali.* But this thoroughness of examination, this slow and laborious mode, the only one truly successful, of arriving at a positive diagnosis, demands more time than the clinical hour can afford. Hence the temptation, at once to avoid severe mental labor and save time, is often too great to be resisted. Thus errors are introduced into the logic of medicine which might otherwise have been avoided.

By referring to page 11 of the volume under notice, the reader will find the following words:

"The case of the patient before us, presents an example of profuse menstruation purely from debility, and is the result of an atonic state of the system and more especially of the uterine vessels, which together with the increased fluidity of the blood from the loss of its fibrin, will at once account for this particular form of hemorrhage."

Now, Andral and Scherer have shown, as the results of their observations, that the proportion of fibrin in the blood actually increases instead of diminishes in consequence of venesection, even when the latter process is pushed to the extreme, as in severe cases of pneumonia. The analyses of Franz Simon indicate that in the blood of horses undergoing starvation, the fibrin increases from 3 to 4 parts—the normal mean—to 11 or 12 per 1000 parts. The same phenomenon is manifest in anæmic and chlorotic cases, and also in healthy individuals during the fatigue induced by violent exercise, when the tissues undergo a more rapid disintegration and metamorphosis. The debility of this case is perfectly compatible with the reduction of the red corpuscles, which we know to constitute the potential elements of the blood, and which are rapidly abstracted by blood-letting, hemorrhage, etc. That the fluidity of the blood was one element in the cause of this profuse menstruation we do not doubt, but that this increased fluidity was dependant upon increased fibrinousness we cannot admit. We are of opinion that the cause should be sought for in the increased absorption manifested by the blood vessel system in its partly emptied condition, by which water is abstracted from the surrounding tissues, and an attempt made by nature to preserve the normal quantity in the vessels, and thus obviate in a measure the constant drain. The blood, under these circumstances, becomes, of course, more and more watery, and tends constantly to escape by exosmose. The decided loss of fibrin appears here to have been taken for granted, as it furnished a ready and seemingly correct explanation of the etiology and pathology of the disease. Upon a careful perusal of the details we can find no evidence of an analysis having been made. On pages 26 and 28 our author, in his remarks on Chlorosis, says, "if the emmenagogue treatment should result in establishing the menstrual flow, the general health suffers just in proportion to the loss of blood sustained." "The great remedy for chlorosis is iron, in some or other of its various preparations." This treatment we know from positive experience to be highly beneficial. But Herberger, who has examined the blood of many chlorotic cases shows conclusively that, under the use of chalybeates, while the red corpuscles increase in quantity, the fibrin diminishes—the latter being converted into the former. Thus,

in one case—a chlorotic female of twenty years—after the administration of iron for several weeks, the red globules had augmented from 38,060 to 98,319, while the fibrin had diminished from 3,609—the healthy average—to 1,950. This treatment—so eminently judicious—appears to us to be in direct opposition to the reasoning advanced on page 11.

Did our limits permit, we might allude to several other instances of what we are constrained to consider as defective physiology.

In conclusion, we are free to confess that we have been both pleased and instructed by the perusal of the "Obstetric Clinique;" and very confidently recommend it, therefore, to the younger portion of the profession, as well as to the great student-class of our Union—for whom it appears more especially to have been designed—as an excellent repertorium of clinical medicine.

J. A. M.

A Treatise on Epidemic Cholera. By HORATIO GATES JAMESON, Sr., M. D., Member of the Medical and Chirurgical Faculty of Maryland; Professor of Surgery; Member of the Philosophical Societies of Berlin and Moscow, &c. Philadelphia: Lindsay & Blakiston.

No subject can ever become old, in the sense of wearisome, in science, except to the mere *dilettante.* Until we have classified all the facts, and solved the mysteries, of a medical topic, let us not cease to welcome new and intelligent observations, or even ratiocinations upon it. This work contains much of both. Nor is it at all a mere compilation—Dr. Jameson having been a veteran in the practice as well as in the study of his profession. In 1832, as Consulting Physician to the City of Baltimore; and subsequently, in York and Columbia, Pa., and elsewhere, he has seen and treated a large number of cases of the disease of which he writes. He has travelled, in fact, in pursuit of data in regard to it, with a zeal akin to that which made the late Dr. Drake so great a light in American inductive medicine. The reader upon Cholera will find in the work of Dr. J. all the leading facts in regard to the natural history of the disease,—in its forms of *cholerine*, *cholero-dysentery*, and *cholera lethalis.* The

style is easy, agreeable and vigorous; so that it makes not only a useful, but a very *readable* book. The doctrine of the non-contagiousness of the disease, and of the inefficacy of quarantine or other seclusive measures, is emphatically and very forcibly set forth. Other noticeable features of the Treatise are, the favor with which bloodletting in the early stage of cholera is spoken of, on the ground of actual experience; some extremely sensible remarks upon injection or transfusion, as a remedy; and the mention of the use of lard as an external application in the cold stage. The scope of the work has allowed the author to introduce a number of extracts from other treatises and periodicals, some of which are of great value; as, for instance, the account of the "physiolo-surgical" experiments of Dieffenbach in Berlin; the excellent Notification of the General Board of Health of England in 1853; and the summary of observations by Schönbein, Bœckel and others upon ozone. We regret that opportunity was not afforded, also, of noticing the experiments and observations upon this subject of Dr. Clemens, of Frankfort-on-the-Maine: which go far towards establishing a more consistent theory of the relations of ozonometry to hygiene, than has yet been suggested.

Curious facts are related, as having occurred in the vicinity of Baltimore, which appear to support, to a certain extent, the opinion of Dr. Bury, that *copper-works* have some preservative influence against cholera.

The view of Dr. Jameson is, that a *binary* causation is essential to the development of a cholera epidemic; its elements being, 1st, a general or ubiquitous *morbific cycle*, and 2d, *local malaria;* to which are often added, also, *fortuitous* causes,—in the imprudence or other accidental circumstances of individuals.

Although it has less of method in the arrangement, and more diffuseness and repetition, than will be agreeable to many readers, we believe that this treatise of Dr. Jameson will be found to be a valuable addition to the most select medical library, and an appropriate monument of the devotion, in advanced years, of one who has served through a long career as a votary of medical science.

H.

Clinical Lectures on Paralysis, Disease of the Brain, and other Affections of the Nervous System. By ROBERT BENTLEY TODD, M. D., F. R. S. Philadelphia: Lindsay & Blakiston. 1855.

Dr. Todd's lectures contain a very full and instructive exposition of the etiology, pathology and treatment of the different forms of paralysis which presented themselves at King's College Hospital during a term of ten years. Although the work cannot be considered a systematic treatise on the subject, so much practical information is contained in its pages, and the cases are so admirably described, both as regards the symptoms of the patient and the various morbid alterations found post-mortem, that it cannot but prove a valuable and useful work to any one who studies it.

The author evidently thinks for himself, his extensive physiological and anatomical knowledge, guided by a clear and sound judgment, giving to his opinion a weight and authority second to no other living writer. In the twenty lectures which comprise the volume, eighty-seven cases are detailed, each one of them illustrative of some peculiar form of paralysis.

Not having space for extracts, we must content ourselves by saying that we consider Dr. Todd's work a most able contribution on a subject upon which more information was much to be desired.

Messrs. Lindsay and Blakiston deserve the thanks of the profession for the very handsome style in which the work is published.

History of the American Medical Association, from its Organization up to January, 1855. By N. S. DAVIS, M. D., Professor of Principles and Practice of Medicine and Clinical Medicine in Rush Medical College, &c. *To which is appended, Biographical Notices, with Portraits of the Presidents of the Association, and of the Author.* Edited by S. W. BUTLER, M. D. Philadelphia: Lippincott, Grambo & Co. 1855.

The above volume comprises a series of articles published anonymously in the New Jersey Medical Reporter, their paternity only being acknowledged when it was determined to republish

them in their present more durable form. "I hope this explanation," says the author in his Preface, "will afford a sufficient apology for the freedom with which my own name is used throughout the work. The whole of it has been written in the midst of the most arduous and pressing professional duties, and without the possibility of commanding time for a revision."

Dr. Davis has executed his task very satisfactorily. The history of the Association from its origin, the indifference, distrust and open opposition which retarded its organization, and its final, triumphant success, so fully and ably described by him, cannot but be perused with interest and advantage by every lover of our profession.

We sincerely hope the work will have a large circulation.

THE MEDICAL EXAMINER.

PHILADELPHIA, SEPTEMBER, 1855.

There is no class of invalids who require the comforts, conveniences, and even the luxuries of life more than those threatened with consumption; and yet it oftentimes has happened to those who have sought the equable temperature of Florida during the winter and spring months, to be so seriously inconvenienced from the want of proper accommodation, adapted to their condition, that the benefits they had hoped to derive by wintering in the south were much diminished.

We are glad to learn that an establishment will soon go into operation to which those suffering from such affections may resort with every confidence, both in regard to its hygienic management and the medical skill of its attending physician.

This *Sanitarium* for affections of the throat and lungs is to be under the care of Dr. N. D. Benedict, late Superintendent of the New York State Lunatic Asylum.

It is located at Magnolia, East Florida, on the river St. Johns, between Jacksonville and St. Augustine, at a distance of about twenty miles from the sea-board. It is one day's journey, by steam boat, from Savannah and Charleston, and four days, by steamer, from New York and Philadelphia, via Charleston or Savannah.

The climate of East Florida is probably better adapted, as a winter residence, for invalids with delicate lungs, than any other part of the

United States. The mean temperature of the winter months is about 60°; frost is rarely seen, and the little rain that falls is rapidly absorbed by a dry sandy soil, shaded by pine forests.

After much observation and deliberation, the above site was chosen, believing it to possess as many, if not more, advantages than other any location in that country.

The house, which is commodious, having large airy chambers, and in every respect well constructed for the purpose, will be opened in November next for the reception of invalids, who may or may not be accompanied by their friends.

We have known Dr. Benedict for many years, and can bear warm testimony, from personal experience, to his skill as a physician, and his warm-heartedness as a man. More particular information may be obtained by addressing him at Philadelphia.

We regret to state that there is no abatement in the ravages committed by the Yellow Fever in Virginia. The number of deaths in Norfolk average about 17 daily, and about 20 in Portsmouth. The papers inform us that Dr. Stone, of New Orleans, who has had an extensive acquaintance with the disease, besides being an accomplished physician, pronounces it to be of the same type as that which afflicted New Orleans in 1853, and to which the Creoles gave the name of *la peste.*

"It seems to differ from the old type of yellow fever in manner of attack, in treatment required, and in the celerity with which the work of death is performed—many of its victims dying within a few hours of their attack. The premonitory symptoms are simply a sharp acute pain like rheumatic pain, or sometimes a paralytic shock in some part of the body. For instance, Mr. Barclay was attacked by what felt to him like a severe blow upon the right hip. Others are attacked by a sharp pain across the knuckles of the hand. Unless attended to immediately, the pain extends up the arm, or leg, and gradually over the entire body. Internal fever ensues, while the skin and extremities are icy cold. The first effort is to bring about a reaction by wrapping the patient in ice, followed by hot mustard applications; the object being to produce perspiration, which, if successful, is generally followed by a cure. Very little, if any internal medicine is needed or allowed, except, perhaps, a slight tonic."

The Beacon, of Norfolk, has the following:

"Our panic-stricken citizens have fled and left nought behind them but pestilence and famine! They have carried off their spoils—their money—but they have left their city overwhelmed in present dismay and distress, with a long vista of adversity in prospective. Its present appearance is gloomy beyond conception. Take a position on Main, at

the intersection of Bank street, and in ordinary times you command a view of the great business mart of the city, such as might convey by no means a faint idea of the New York "Broadway," on a small scale. But now how changed! All the stores, with not more than half a dozen exceptions, closed on Main street and Market square, some score or two of persons passing, and these either members or employees of the Howard Association, on some errand of mercy. The rattling of wheels is heard as usual; but alas! they are the wheels of physicians' carriages or of hacks used for despatch in conveying messengers. Go to any other part of the city and the same prevailing gloom is seen. The wharves are bare of shipping, and desolation reigns throughout their borders. All is cheerless and heart-sickening."

A letter writer under date of the 23d, also says:

"My estimate of 250 cases now under treatment, though formed on consultation with several of our leading physicians, seems to be too low. At the Dispensary alone 200 prescriptions a day have been put up for two or three days past, and there are five other apothecary establishments whose proprietors are as busy as they can be all day. Our doctors too, are going their rounds from early dawn to bed time. We know one who paid 68 visits in one day, another who had a list of 70 patients, another of 39, another of 31, another of 29, and we have about 15 of the faculty in good practice. You may form your own estimate from these figures. Drs. Peniston, Freeman and De Castro* are constantly on the go. The former paid 40 visits in Portsmouth yesterday, besides an almost equally large number here. All three gentlemen are doing noble service in the cause they have voluntarily espoused. Dr. Gooch, of Richmond, also came to this city yesterday, and paid a visit to the hospital at Julappi, where he made a careful inspection of the patients, every facility for that purpose being shown him by Dr. William M. Wilson, the accomplished and skilful resident. There are now 33 sick, and 47 convalescent in the hospital. The sick, for the most part, are doing very well, and it has been remarked, that in almost every case where the patient has been removed there when first attacked by the fever, he has rapidly recovered. The deaths have been few in comparison to the numbers sent, thus showing the virtue as well of pure air as of good attendance, neither of which the poor sufferers could enjoy if left at their homes in the city."

We are happy to say that the fever has sensibly abated in New Orleans during the last ten days.

CORRECTION.

In the July number of the Examiner, our readers were informed that Dr. Caspar Morris was chosen one of the Accoucheurs to the Philadelphia Hospital, Blockley. It should have been printed, Consulting Physician to the Children's Department, and Lecturer on the Diseases of Children.

* From Philadelphia.—Ed.

MEDICAL NEWS.

Dr. Jacob Bigelow has resigned his post of Physician to the Massachusetts General Hospital. Dr. Augustus Gould was unanimously elected to fill the vacancy.

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Dr. B. Fordyce Barker has been elected one of the Physicians to the Bellevue Hospital, New York, in the place of Dr. Thomas F. Cock, resigned.

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Dr. J. C. O'Neal, of Baltimore, obtained a verdict from the Superior Court of that city for damages, in the sum of $10,000, against one of the persons who were injured by the awful railway accident of the 4th of July, last year. The defendant had both his legs fractured, and was treated by Dr. O'Neal. After his recovery, he circulated a report, through the papers, that his limbs had not been broken, and that Dr. O'Neal had used deception in the management of his case. Hence the verdict.— *Western Lancet.*

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OBITUARY.

Died, at Saratoga Springs, New York, on the 20th of August, Dr. Moreton Stillé, in the 33d year of his age.

It is with sorrow that we announce the above melancholy event to our readers. Dr. Stillé's acquirements, manly character, unassuming deportment, and moral worth secured for him the respect and esteem of all who were acquainted with him. With most excellent natural abilities, he had a carefully cultivated mind, was master of several languages, and from advantages of study and travel, was both an accomplished scholar and physician. As a writer, besides occasional contributions to the American Journal of Medical Sciences, and to this Journal, Dr. Stillé was author of a most valuable paper on the pathology of Cyanosis, written for his thesis for the degree of Doctor of Medicine, and honored by being published by authority of the Faculty of the University of Pennsylvania. It is unnecessary for us to comment on the merits of that paper, as it is well known to the profession, and secured for its author, both at home and abroad, a reputation rarely attained by one of his early age.

For the last two years of his life, Dr. Stillé had been unintermittingly occupied in writing a work on Medical Jurisprudence, which we are happy to state is printed, and will shortly be published. Early in the present year he was appointed Lecturer upon the Theory and Practice of

Medicine in the *Philadelphia Association for Medical Instruction.* A rare critical sagacity applied to the results of extensive research rendered his instructions both accurate and complete, and we are informed by his colleagues that they were highly esteemed by the class to whom they were imparted.

There is every reason to think that the confinement and sedentary life, resulting from his deep interest in and close application to his posthumous work, together with the new and onerous duties of his Lectureship, were of great injury to a constitution and frame physically unfitted for such untiring labor.

By his many friends, his memory will long be warmly cherished, and while we cannot cease to regret the bright promise blighted by his untimely death, we

> "Trust that those we call the dead
> Are breathers of an ampler day
> For ever nobler ends."

—

Died, at Richmond, on the 15th of July, of valvular disease of the heart, Dr. R. L. BOHANNAN, Professor of Obstetrics in the Medical College of Virginia, aged 68 years.

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On the 12th of July, at Smithfield, Rhode Island, Dr. ELISHA BARTLETT, aged 51 years, author of a work on Medical Philosophy, also of a Treatise on Fevers, both of them highly valued by the profession.

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M. VALLEIX.—This distinguished physician died of malignant sore throat, on the 12th of July last, after a short illness. His remains were accompanied to the cemetery of Mont Parnasse by a large number of devoted friends. The orations at the tomb were delivered by MM. Barth, Goupil, Latour, and his old master Louis, who was much affected. M. Valleix was a man of great erudition, and intimately acquainted with the contemporary medical literature of England. To strangers he was accessible and polite, and to not a few in this our northern metropolis, his memory is endeared by many acts of friendship. His chief works are—the *Guide du Médicin Praticien*, the *Traité des Névralgies*, and the *Clinique des Maladies des Enfants nouveau-nés.—Edin. Med. Jour.*

RECORD OF MEDICAL SCIENCE.

Observations on Scarlatina. By HENRY TWEEDY, M. D., &c.—There is no lack at present of able and useful contributions to our medical and surgical literature, but all must admit that it is of the first importance that practical men (many of whom have neither time nor taste for writing learned and lengthened essays) should be encouraged in every possible way to write as briefly and as plainly as they please upon points of practice not generally adopted, and the correctness of which has been proved in perhaps hundreds of unpublished cases.

The following observations upon scarlatina shall be confined to three points of practice:—

1ST. EARLY PURGATIVES.
2D. COLD DRINKS.
3D. THE APPLICATION OF NITRATE OF SILVER.

I have had extensive opportunity of witnessing and treating eruptive diseases when on different occasions they severally assumed the form of an epidemic in Dublin. Of scarlatina, which is justly considered the most formidable, I do in truth declare that, to the best of my belief, not a single case, for the last ten years, proved fatal of those which I had seen within twenty-four hours of the commencement of the attack, and which had not previously been put under treatment. Humanly speaking, the cause of such success has been that I have long held in deep abhorrence an *early* aperient in *any* form of eruptive disease. I state it advisedly as my opinion, and one not hastily formed, that a smart purgative draught is in itself sufficient to convert a case of mild scarlatina into a malignant, and, in all probability, a fatal one. To my mind it is not difficult to assign a reason as to how and why this should be so.

The primary stage of every disease, whether medical or surgical, is inflammatory, and this supposes the diminution—in some instances, the almost entire suspension—of all the secretions. The mucous membranes, which in health are always moist, become in the early stage of fever, and more especially the eruptive fevers, dry, rough, and parched. An irritating purgative which, in hundreds of cases, forms the groundwork of the treatment, increases considerably this state of things, and therefore should by all means be avoided; whereas medicines which tend to relieve the skin, subdue the fever, and restore the secretions, will, in almost every instance, cause the bowels to act freely and naturally.—Should such fail to be the case, a mild aperient, about the conclusion of the third day, will seldom fail in accomplishing all the indications required.

I consider this point one of great practical importance, involving the lives of many of our fellow-creatures. I have for years felt it my duty to warn parents, guardians, and proprietors of schools, &c., against the objectionable and most dangerous practice so often adopted, of giving aperient medicines during the prevalence of any epidemic. They have, to say the least of them, in numerous cases, done irreparable harm,

lessening considerably, if not altogether destroying, all hopes of a good and complete recovery.

I cannot say that in one solitary case for the last ten years I ever ordered a particle of aperient medicine before the eruption was not only fully and fairly established, but further, beginning to decline; and I do positively assert that I never had cause to regret it. The bowels have, in many cases, been most satisfactorily relieved by medicines given with a totally different object, and in all the patients did well.

The medicine of all others on which I rely most, and the efficacy of which, in many diseases, is far greater than is generally known, is ipecacuanha. For a strong robust child of 10 or 12 years of age, I should order the following mixture :—

℞ Aq. distil. ℥vii.
Pulv. ipecac. gr. vi.
Syrupi croci ℥j. M.

One tablespoonful to be taken every second hour. The dose of the medicine should be increased or diminished in proportion to the age of the patient and the effect produced.

Cold Drinks.

In connection with eruptive and inflammatory fevers generally, it may be well to mention that the objection entertained by many to cold water as a drink is, in my opinion, wholly untenable. I cannot possibly say in how many cases of scarlatina, measles, and other eruptive diseases, whether in adult or child, I have given the attendants full permission to give the patients cold water to any extent desired by them. Suffice it to say, that for at least ten years it has been, with perhaps one or two exceptions, my invariable rule. I am thankful to say, that not a solitary case has occurred which caused me to regret it. On the contrary, it has always proved not only a safe, but, in my opinion, the most useful, and certainly the most agreeable drink I could possibly employ.

While strongly advocating the propriety of giving patients as much cold water as they could possibly desire during the inflammatory stage of fever, I am not to be supposed to say that I should *order* every (or any) patient to drink quantities of this fluid against his will: quite the contrary. There are to be found some, especially in the upper ranks of life (I do not think I ever saw one in the lower), who, whether in sickness or in health, have an intolerable aversion to cold water as a drink. I have before my mind the names of some such, who have repeatedly acknowledged to me that never in their lives did they drink one glass of plain cold water at a time. With such I did not press the remedy, and each did well taking large quantities of warm drinks to assuage their intolerable thirst.

As there are physicians favorable to early purgatives, so there are those hostile to cold drinks in the first stage of eruptive fevers. My observation of the effects of both remedies in a large number of cases has led to the following conclusions :—

1st. A case may occur in which a purgative might be called for as the foundation of treatment in early fever, but I must ever maintain that such case is the exception, and not the rule.

2d. Cases may and do occur, in which early purgatives in fever do no apparent mischief; on the contrary, the patients progress satisfactorily.

3d. Constant observation forces upon me the conviction, that most serious consequences are produced by purgatives in the early stage of eruptive disease, eventuating in the most startling results, which, in my opinion, might have been avoided by other and milder treatment.

4th. The choice of warm whey, &c., or cold water, may safely be left with the patient. In nineteen cases out of twenty, the latter will be preferred. Gratifying the patient in the matter has never disappointed me.

Nitrate of Silver.

The third consideration with reference to scarlatina, which I desire briefly to advert to, is the Application of Nitrate of Silver to the Fauces.

I believe no physician doubts the efficacy of this remedy, but certain I am that many practitioners might nearly, if not altogether, as well neglect this most useful and powerful agent, as use it as they do. There are many who never apply nitrate of silver to the throat in any other way than by means of a camel's hair pencil. Now, nothing could shake me in my conviction, that hundreds of cases of scarlatina have proved fatal from this cause alone. I have seen ulcerated sore throats, as severe as perhaps any which the records of medicine can afford, and which had brought the patients suffering from them to the very confines of the grave. Had I nothing better at hand than a camel's-hair pencil for applying a caustic solution, to a moral certainty they would all have terminated fatally.

The right mode, in my judgment, for employing this great (I might almost say only) remedy in this extreme case, in which life is all but extinct, is to get a long probe, round which should be rolled a piece of lint. This should be allowed to stand for about one minute in a twenty-grain solution of nitrate of silver. A spatula or spoon having been placed on the tongue to depress it, the probe should be passed low down into the throat, the interior of which should be cleverly rubbed all round. Those who have practised this in the way described have had their hearts gladdened by the wondrous change in a moment produced. A sponge attached to a rod of whalebone has been used and recommended by many. This, though infinitely preferable to a camel's-hair pencil, is open to objections:—1st. The same sponge should not be used (though I have seen it done) for more than one patient, and we often meet with two, three, or even more at the same time, and in the same house. 2d. There is a difficulty in having the sponge kept clean. 3d. The sponge is ten times more disagreeable to the patient; and lastly, it does not answer the purpose so well.

I know of no disease, the recoveries from which have astonished and rejoiced me so much as scarlatina. No case should be despaired of, or left without the most vigilant care, until life became wholly and unmistakably extinct. I feel perfectly satisfied that there are many practitioners who have reason (upon a review of past experience of this disease above all others) bitterly to regret the course they pursued.—

Like croup, it runs through its stages quickly. To neglect proper treatment, and that at the right moment, or to employ injurious means, is an error never to be remedied.

Some time since I was attending a fine boy, aged seven years, in Mountjoy-square. He labored under malignant scarlatina. The case was one demanding the utmost care and attention, it being as unpromising—I might perhaps say as hopeless—a case as any I had ever seen. Having had occasion to pass the house at a very late hour of the night, I paid my little patient an unexpected visit. The person who opened the hall-door announced to me her belief that the child was dead. On entering the room I beheld the mournful sight of a fond father with what he considered to be his dead son lying in his lap. The scene was one not soon to be forgotten. On a very close examination, I could clearly perceive that the child was still alive, but no more. One drop of fluid he could not swallow, and his respiration was almost imperceptible. I instantly applied the nitrate of silver in the manner I have described; not, I must say, with much, (if any) expectation of success. The effect was literally miraculous. An immense quantity of mucus and lymph adhered to the lint; he immediately breathed freely, before I left the house drank cold water, and in the providence of GOD made a quick and complete recovery.

This is a case of peculiar interest, pointing out distinctly two important points—viz., 1st. The extreme value of nitrate of silver when properly applied. 2d. The physician's duty in never turning his back upon his patients, and saying no more can be done, so long as the smallest appearance of life remains.

A short time since I attended a family in North Richmond street, who have suffered severely from scarlatina. The mother took the disease from her children, four or five of whom were ill together. With the exception of one, the cases, though far from being mild, were not alarmingly severe. In the eldest, a handsome girl, about 11 years of age, the disease assumed a malignant type. On the night of the fourth or fifth day, I was sent for in great haste, and was informed by the messenger that my patient was dying. On entering the room I had good reason for fearing that what I had heard was but too true. Her face was absolutely purple; her respiration so painfully difficult that she required to be propped up with pillows in her bed; an intelligible word she could not utter, and swallowing was quite out of the question. I lost not a moment in applying the caustic solution, as in the last case mentioned, and with similar and equally happy results. Her recovery was everything that could be desired, and she is now, I am thankful to say, a healthy young lady, full of life and spirits.

I do not presume to say that the man who adopts the foregoing treatment must necessarily succeed in every or in any case; but this much I must say, that in my experience it has proved successful, and I confidently believe that none who adhere to it will have reason to regret it.

Dublin Medical Press.

On the Pathology of the Pancreas. By Dr. Eisenmann.—The interesting experiments of M. Cl. Bernard upon the uses of the pancreatic juice, have led the author of this article to consider, whether or not the results, obtained by that physiologist, are capable of being applied to the diagnosis of disease in this organ.

If the pancreatic juice assists the digestion, and consequently the absorption of fatty matters, the conclusion is, that when the functions of that gland are destroyed by disease, fat should pass with the dejections, and be found in them in an unaltered condition. It is interesting to observe how nearly science has anticipated what the observations at the bedside of patients laboring under such disease have confirmed. The author has united the facts observed by others with those presented in a case of his own.

Of seven cases adduced, six terminated in death; there had been abundant fatty evacuations, and *post mortem* examination showed the existence of induration, or other alteration in the pancreas. In the seventh case, quoted from Lussana, the patient recovered. The principal symptoms in this case were copious salivation, a sense of weight in the epigastrium not increased upon pressure, eructations, flatulence, coldness of the surface, and a small and slow pulse. The expression indicated abdominal disease. Constipation was present, but the fæces contained yellowish particles resembling fatty concretions, and which were in fact composed of fatty materials. These occurred in increased quantity after purgatives. M. Eisenmann regards Lussana as the first who applied to pathology the discovery of Bernard. In the instance observed by himself, the author had diagnosed pancreatic disease, but had not made out the presence of fat in the evacuations. This circumstance induced him to suppose that the pancreatic juice did not exclusively produce the absorption of fatty matters, but was assisted in this action by the bile. Budge and Wistinghausen have made experiments which countenance this idea, and the author recalls a case cited by Pearson, of a woman who evacuated daily 3 oz. of a fatty substance, and did not present, upon *post mortem* examination, any trace of pencreatic disease, but the liver was pale, large, and destitute of bile. One remarkable circumstance, is, that in many of the cases cited by M. Eisenmann, the oily evacuations had ceased, while the pancreas was so indurated as to render the performance of its functions impossible. The author also alludes to another circumstance, not less worthy of remark, viz., the large quantity of fat yielded, a quantity much greater than that contained in the food, and which leads to the supposition that part of the fœcal matters is transformed into fat. However that may be, the fact shows us that the presence of fat in the intestinal evacuations indicates with probability, but not with certainty, derangement in the functions of the pancreas; while, on the other hand, the absence of fatty matters does not authorise us to conclude that there is no disease in this gland, if other symptoms exist indicative of such an affection.

The author has endeavored to employ the facts collected by him in establishing a more correct symptomatology of disease of the pancreas. He divides the symptoms into two classes, those accompanying degenera-

tion of the gland, and those arising from its acute or chronic inflammation. For the first of these, the symptoms are too various to afford any certain signs of the affection; the presence of fat in the evacuations, and the examination of the abdomen by the hand, suggest, but cannot positively determine, its presence. It is otherwise, according to the author, with inflammation of the pancreas. This is distinguished by a sense of weight in the epigastrium, which is especially manifest about two hours after eating, extending towards the breast with a feeling of oppression; loss of appetite, inodorous eructations, *malaise*, retching or even vomiting, although the tongue may remain clean; constipation; small, diminished pulse; emaciation; expression of features indicative of an abdominal affection; melancholy and sometimes weariness of life.

The author recommends, as a mode of treatment, the waters of Friedricks-hall, in small doses.—*Ed. Med. Jour. from Vierteljahrschrift fur die Praktische Heilkunde*, 1853.

Sidney Smith as a Country Doctor.—"But I came up to speak to Annie Kay. Where is Annie Kay? Ring the bell for Annie Kay." Kay appeared. "Bring me my medicine book, Annie Kay. Kay is my apothecary's boy, and makes up my medicines." Kay appears with the book. "I am a great doctor; would you like to hear some of my medicines?" "Oh yes, Mr. Sidney." "Here is the gentle-joy, a pleasure to take it; the bull-dog, for more serious cases; Peter's puke; heart's delight, the comfort of all the old women in the village; rub-a-dub, a capital embrocation; dead-stop, settles the matter at once; up-with-it-then, needs no explanation; and so on. Now, Annie Kay, give Mrs. Spratt a bottle of rub-a-dub; and to Mr. Coles, a dose of dead-stop, and twenty drops of laudanum. This is the house to be ill in (turning to us;) indeed every body who comes is expected to take a little something; I consider it a delicate compliment when my guests have a slight illness here. We have contrivances for every thing. Have you seen my patent armour?" "No." "Annie Kay, bring my patent armour. Now, look here, if you have a stiff neck or swelled face, here is this sweet case of tin filled with hot water, and covered with flannel, to put round your neck, and you are well directly. Likewise, a patent tin shoulder, in case of rheumatism. Here you see a stomach-tin, the greatest comfort in life; and lastly, here is a tin slipper, to be filled with hot water, which you can sit with in the drawing-room, should you come in chilled, without wetting your feet. Come and see my apothecary's shop." We all went down stairs, and entered a room filled entirely on one side with medicines, and on the other with every description of groceries and household or agricultural necessaries; in the centre, a large chest, forming a table, and divided into compartments for soap, candles, salt, and sugar. "Here you see," said he, "every human want before you."—*From "A Memoir" by Lady Holland.*

On Cold Abscesses. By M. JOBART.—The "hot" abscess or phlegmon is developed with great rapidity, causes more or less serious functional disturbance, is the occasion and seat of severe pain, and is mani-

fested by coloration of the skin. The "cold" abscess, on the contrary, is developed insidiously, and ordinarily without appreciable cause; it causes no local irritation, and there is no other local sign than tumefaction of the affected part as compared with the sound side. The patient does not complain of pain unless the abscess is placed in the vicinity of a nerve. There is abundant fluctuation, and sometimes on pressure being made there is a peculiar sensation felt like that imparted by grains of rice or crushing snow. In phlegmon the pyogenic membrane is thin and easily destroyed, while in cold abscess, and especially when this is somewhat old, it is very solid, whitish, with a simple alveolar organization. The pus secreted is not matured like that of the pus of phlegmon, but is somewhat viscous and semi-transparent, having white caseous lumps floating in it, and containing the débris of the false membrane which sometimes establish adhesions between the walls of the collection. Contrary to what occurs in phlegmon, these abscesses may long remain in contact with surrounding tissues without inducing changes in them. Seeing the insensible mode in which the pus is secreted, we might almost say that the cold abscess is the result of a sort of local apathy of the region affected. These abscesses are usually found where the lymphatic vessels and glands are in large numbers; and although they are most commonly found superficial, they yet often occur among deep-seated organs. Although it is generally the case that the individual is a scrofulous subject, it is far from being always so; but, at all events, the abscesses only are found in persons enfeebled from this or other causes.

All treatment must be directed to the modification of the characters of the pyogenic membrane; and if this be not modified or destroyed throughout its whole extent, we shall see happen what takes place in vulvar abscess when this membrane is not totally destroyed, viz. the reproduction of the abscess after apparent cure. Iodine injections have been much employed with a view of obtaining such modification and inducing the secretion of coagulable lymph, by which the walls of the abscess may become united. M. Jobert finds them succeed only when the abscess is recent and of small extent. In old and large collections the long incisions of Lisfranc are best, taking care to destroy all the membrane and preventing undue hæmorrhage by plugging the wound with amadou. When the skin is thin and diseased, and does not possess sufficient vitality to effect any union with subjacent tissues, a portion must be excised, and the wound healed by granulation.—*Med. Times and Gaz., from Gaz. des Hopitaux.* No. 57.

Tin Tumbler taken from a patient, post-mortem, and which had been introduced by him into the rectum, for the purpose of reducing prolapsus of that intestine.—The tumbler was sent to the Boston Society for Medical Improvement by Dr. JOHN O. STONE, of New York city, and was presented, and the account of the case read, by Dr. H. O. STONE, of Boston. The following is an abstract of the detailed description of the case, read by Dr. S., and which was published in the Boston Medical and Surgical Journal of May 14th, 1834.

The patient introduced the tumbler on the 4th of April, 1834, causing

its entrance into the bowel by sitting upon it. The tumbler being drawn upwards with the returning intestine, attempts were made by the patient to extract it, with his fingers, and by means of "shoe-maker's forceps." "With these he had considerably broken and flattened the edge of the base or rim, of the tumbler, and forced it beyond the rectum, into the colon." It was found in this situation by the physician who was summoned, Dr. G. Moodie, of North Andover, Mass. Dr. M. introduced his "hand and arm into the rectum, seized" the tumbler and "made a powerful" but unsuccessful "effort to extract it." The blunt hook was next tried, without extracting the tumbler, although it was brought down so that "it could be seen." "Owing to its flattened state, it hitched in the plicæ of the intestine." Several physicians and surgeons were called in consultation; among others, Dr. Joseph Kittredge, of Andover, and Dr. Whiting, of Haverhill. No efforts at extraction by the hook or the fingers were of any avail; although the tumbler was brought into view and seized, powerful efforts being again made to disengage it from its situation. One of the practitioners again introduced his hand, but could not bring the tumbler away. The patient asked to have his abdomen opened, and the foreign body thus removed. "He was told that this would produce certain death." A proposition to divide the levatores ani was negatived by Dr. Kittredge, who feared fatal hæmorrhage. "The patient lived about three days after this. His tongue sloughed, and there was gangrene of the large intestines. The tumbler was extracted after death: it measured $3\frac{1}{2}$ inches in length, $3\frac{1}{2}$ inches in width, in the direction of the flattened part, and 2 inches across its base; it would hold nearly three gills." It is preserved in the Society's Cabinet.—*Boston Medical and Surgical Journal.*

On Calcareous Metastases. By RUDOLPH VIRCHOW.—Some years ago I was called on, in Berlin, to make the examination of the body of a young lady, the course of whose disease had baffled the diagnostic and therapeutic skill of her attendants. A member of one of the highest families, she had, in the bloom of youth and beauty, and without any assignable cause, begun to complain of dragging pains in the most different parts of the body; in spite of the most attentive treatment by physicians of the greatest experience, this apparent rheumatism steadily increased, the nutrition of the body was finally interfered with, and death put an end to her severe suffering, without any evident local affection having been discovered. The autopsy exhibited very numerous and extensive cancerous nodules in almost all the larger bones of the skeleton, particularly in the bodies of the vertebræ and the bones of the skull. But nowhere did these nodules project above the osseous surface, they were in almost every situation covered with periosteum without any material alteration of the level, and lay in large, irregularly corroded chasms in the bones. The loss which the latter suffered in their constituent elements, and especially in their calcareous parenchyma, was consequently very considerable.

Accordingly, it did not appear strange when, on examining the kidneys, we found in the pelvis and calyces great quantities of a dirty white

deposit, in some parts sandy, in others crumbling, consisting principally of earthy carbonates and phosphates. But I was not a little surprised, on cutting through the lungs, to find in their central portions singularly dry patches of considerable extent, of a grayish white color, and rough to the touch, permeable to the air, but offering considerable resistance to the knife; and likewise to encounter in the stomach very extensive whitish parts, also very dry, and feeling almost sandy: a closer examination of both of which showed that the parenchyma of the lungs, and the mucous membrane of the stomach, were throughout overloaded with calcareous salts.

I had never before seen these changes, but they were so well marked that it appeared scarcely possible to doubt that we had to do with a metastatic deposit of those salts of lime which had been removed by absorption from the cavities in the bones. In rickets it has, indeed, been known since the celebrated case of Madame Supiot, that the urine in the commencement of the disease lets fall a chalky deposit, and nothing is more expressive than the remark of this unfortunate patient, that her limbs "were fermenting," when her urine was loaded with a large quantity of the sediment. Must we not in this case infer that the earthy salts which pass off with the urine are really derived from the bones?

If we add the experience afforded by the study of gout, where the urates which should be excreted by the kidneys become deposited on the joints, and, indeed, as Schroeder Van der Kolk has shown, on the tendons, ligaments, skin, nerves, and vessels, we shall be led to conclude that the salts of lime which in cases of great destruction to the bones, reach the blood in increased quantity, are first of all separated through the kidneys, but that when this mode of elimination is insufficient, other parts of the body become filled with them. Thus, also, we observe that jaundice does not become very evident until the elimination of the coloring matter of the bile by the urine is not sufficient to purify the blood, and if time should hereafter confirm the observation of H. Meckel, who found the Malphigian tufts full of salts of silver, in an epileptic person long treated with the nitrate of its oxide,—the well-known coloring of the external parts after the use of lunar caustic would certainly admit of our inferring the existence of a similar condition.

The observations which have been made in reference to the retention of urea, particularly those of Bernard, become of especial interest in connection with this subject. In such cases it would appear that the urea accumulated in the blood also effects its metastases, and that chiefly in the stomach abundant elimination of carbonate of ammonia takes place, while the strongly ammoniacal smell evolved from the lungs of uremic patients has long been familiar to the physician.

Little has been said by writers upon the calcification of the lungs and stomach. Voigtel has collected a great number of observations on ossification of these organs, yet none of them appear to correspond exactly to the case before us. The same may be said of the quotations of Cruveilhier, Joh. Fr. Meckel, and Hodgkin, for in this case we have

neither a formation of bone, nor a peculiar concretion, but a fine infiltration or incrustation of the parts. In more recent authors I find nothing at all upon this point.—*Dublin Quarterly Journal.*

Case of Empyema on the right side, Acute Pleurisy on the left, simulating Pericarditis. By JOHN T. METCALFE, M. D.—John Armstrong, æt. 23, chairmaker, entered the New York Hospital Jan. 30th, 1855. One week before admission, had been taken with a cough, pain in the right chest, and dyspnœa. At the same time, there was observed a loss of appetite, a general febrile reaction, thirst and headache. The cough was accompanied by scanty expectoration of mucus, not characteristic in appearance. Since the commencement of his attack, these symptoms have all diminished with the exception of the stitch-like pain in the side, of which he complains a good deal. On admission, the pulse was 96; respiration 36; tongue moist, coated; eyes suffused; general appearance of distress; lies most comfortably on left side. The whole of the right chest dull on percussion; no vesicular murmur audible on this side; bronchial respiration (deep) and broncophony. On left side, nothing abnormal, except puerile respiration generally diffused, detrusion of heart's apex one inch to the left. *Wet cups to affected side. Mixture of Spirits of Mindererus and Ipecac. To take every four hours, a pill of calomel, squill, and digitalis* (*one grain of each*).

Under this treatment, with a blister to the side, there was evident amendment, so far as regarded the pain and dyspnœa. The chest seemed to become more distended however, the heart's apex being displaced as low as the sixth intercostal space, four inches to the left of the sternum. In place of the bronchial sounds audible on entrance, there was absence of respiration, except at the very summit of the right lung. The patient was able to get up and walk about the ward, but his appearance was far from satisfactory.

February 14. Just after having eaten dinner, he was suddenly seized with very great dyspnœa, the respiration ran up to 60 in a minute and the pulse to 120. The skin was cold and clammy; the eyes were anxious and protruding; there was complaint of pain on the left side, over the præcordial and epigastric regions. Breathing could only be performed whilst the patient was held up in bed. The left chest seemed alone engaged in respiration. Over the præcordial region, in its lower and outer half, a strong, well marked fremitus, synchronous with the cardiac systole, was noticed on palpation. Where this existed, a rough friction murmur with the first sound of the heart, not transmitted along the aortic branches, was noted. At the upper portion of right chest, under the clavicle, were resonant percussion, amphoric respiration, and metallic tinkling, very well marked. An anodyne was ordered, of the *compound spirit of sulphuric ether with the solution of sulphate of morphia;* and directions given to let me know in case relief should not be obtained, so that paracentesis of the chest should be performed. He continued with great oppression of breathing, and in the course of the night died, somewhat suddenly.

On post-mortem examination, the right lung was found compressed to

a size of two fists, and forced back against the spine at the upper part of the pleural sac. On inflation through the main bronchus, air escaped by several small perforations on the upper surface of the lung. These perforations occurred in the wall of a tuberculous cavity of considerable size, which had been reduced, by the pressure of surrounding fluid, to very small dimensions. Fibrous exudation covered the outer surface of the lung. The pleura was nearly quite full of cream-like, inodorous pus.

In the left pleural cavity were several ounces of recent serous exudation, in which floated shreds of false membrane. The outer surface of the lung was roughened by this exudation, especially that part which lay over the heart, in contact with the costal pleura. The lung tissue contained a few scattered tubercles. Beyond slight enlargement of the heart, there was nothing noticed abnormal with respect to it or to the pericardium.

This case was one in which the dyspnœa had been explained, during life, by the perforation of the lung and production of pneumothorax. With regard to the friction-sound and fremitus, existing as they very markedly did over the præcordial region only, and synchronous with the systole of the heart, no one who saw the case for a moment doubted the presence of pericarditis as the cause of their production. Pleurisy so situated and giving rise to these signs, is of extremely rare occurrence. In my experience, I remember only one other case in which a similar error in diagnosis has occurred. In this there was fibrinous exudation over the pulmonary pleura, which is in direct contact with the pericardium.

The patient had been carefully examined by the House Physician with reference to his previous state of health, but gave no account of any illness connected with the tubercular excavation in the right lung. His intelligence was not of a high order; and every one familiar with the interrogation of a majority of those admitted to the hospitals, will understand the difficulty of getting a full and truthful account of their previous complaints.

34 *East Thirteenth street.* *N. Y. Med. Times.*

Certificates to the efficacy of secret remedies.—There are few ways in which good-natured people are doing so much harm, while meaning to do good, as in signing their names to medical certificates, to be distributed all over the land in the public newspapers, or thrust upon us, whether we will or no, at our very doors. This has got to be a crying evil in the land, and it is time it was corrected. It is doing much, very much, to impair the faith in remedies properly given, to shake confidence in the medical profession, and thus incidentally to re-act upon the community to their great disadvantage. It is a gross injury to the medical profession. It constantly taunts them with the insinuation, "Look here! what all your boasted science could not do, this man whom you denounce as an ignoramus, has done! This medicine has cured me; yours did me no good, and I might have been in my grave for all you!

From this time forth, fling doctor's physic to the dogs, and let me have only the healing drugs of the inspired natural physician!" Waiving for a moment all question as to the amount of real efficacy in the remedies thus vaunted—granting even, for argument's sake, that the facts are as stated, what does it amount to? Only that a drug taken at the right moment has wrought a good effect, no more. For this shall it be emblazoned in every newspaper sheet as the great catholicon? Why, here are two hundred physicians in Boston, doing, with the blessing of Providence, precisely the same thing every day! And are they justified in proclaiming their skill and the power of their remedies for this reason? No true physician, at any rate, would give an affirmative answer. And yet their patients forsake them, or secretly use while under their care any nostrum their assiduous friends recommend. Or if they ask the advice of their physician as to the expediency of trying the remedy, he has no means of knowing its real character, and of course cannot recommend it. Still human nature is such that even the mystery which shrouds it gives it a fascination, particularly if the dose be *pleasant to the taste.* Men of respectable position in the community give up their business to devote themselves to the sale of the article, and untold sums are their reward. Grateful patients eagerly subscribe the certificate of its real or supposed virtues, while yet in the flush of their enthusiasm at its efficacy, and the document goes to the world, to add one more to the legion of medical delusions which are a stigma upon the present generation. Let any intelligent man go into a public hospital, and he will find numbers of patients who will tell even more extraordinary experiences of their own—how they were full of pain, motionless, helpless, but in twenty-four hours they were changed men, to all intents and purposes cured. Others will tell you that for years they had not had the use of their limbs, but now they walk rejoicing. Happy as these occurrences are, blessed indeed to the patients, the physician who has been the fortunate instrument in bringing them about does not, or ought not, to claim any exclusive merit; rather does he most willingly point out to his professional brethren the means he has used with such success. Thus is the blessing extended beyond his own immediate sphere, and no selfish thought of personal profit limits the exercise of his professional benevolence. The medical journals are crowded with reports of just such cases, which go forth over the whole world to bless mankind. Nay, *these very remedies* are not unfrequently taken up by shrewd nostrum venders, and after being disguised by some inert addition, are sold to the unsuspecting public at a profit of thousands per cent., without the least credit being given to the man who first applied it for such a purpose. But there is another very important consideration which is entirely overlooked by the patent-medicine-swallowing, or the puffed-medicine-swallowing community, which is this—*medicines positively effective for good are equally powerful for evil.* The knife is a catlin with two edges, let him who uses it see that he cuts not his own fingers. And this is no imaginary casualty. It is a fact well known to physicians, that cases are frequently brought under their own observation, of excellent reme-

dies having been taken to great excess when not administered by the direction of a professional man. It is astonishing to see the recklessness with which people sometimes do this, taking *ad libitum* the most powerful medicines of the pharmacopœia, simply because under some circumstances they have been recommended to them by some respectable physician, who never intended they should be adopted into such promiscuous use. The charity of these good people is most liberally extended to their friends, inducing them to take the same, they alone being responsible for the consequences. And the reason for this—not always, but often—is to avoid the necessity of paying the physician the fee which is his due for advice on the subject. Again, supposing the the secret remedy to have been effectual in certain cases, *the cases in which it has failed or done harm* far out-number them, and of these the community hears not. Many of the cases of supposed cure turn out to be only transiently benefited, and the deluded sufferer only falls back again into greater hopelessness. Mean-while the certificate stands, and money pours into the pocket of the nostrum-vender—what else does he care for?

We would remark in conclusion that—medical discoveries should be the property of the human race; as free for the use of mankind as heaven's natural gifts of light and air. Only when open to such unrestricted use can their real value be tested. The noble calling of physician ought not to be degraded to a mere matter of making money; the community are as much interested in this as physicians, perhaps more so. By following the course which is getting to be so common, they are discouraging and starving those whom they ought to regard as their true friends.—*Boston Medical and Surgical Journal.*

SHORT NOTICES OF HOSPITAL THERAPEUTICS.

Artificial Eyes.—The following scraps of information as to the employment of artificial eyes, which we have acquired in watching the practice at the Royal Ophthalmic Hospital, may be welcome to some of our readers. (*a*) The success in the deception as to appearance is generally most complete. Several very pleasing cases have fallen under our notice, in which a glass eye, by hiding a loathsome deformity, and restoring personal appearance, became the means of effecting a complete revolution in the worldly prospects of the wearer. (*b*) In order to complete success, it is very desirable that the substitute eye should move well. This, however, is not essential, as should the two eyes not move equally the only defect suggested to the casual observer is that of a slight squint. (*c*) To secure the movements of the artificial organ, the natural globe, in its collapsed state, should, if possible, be retained in order to serve as a stump. This stump or cushion, receives the attached muscles and obeys their movements, of course carrying with the it concave glass eye which has been fitted upon it. (*d*) If the entire globe be diseased, and its removal necessary, the operation should be conducted on the modern plan, viz., by division of the muscles close to their attachments, nothing whatever excepting the globe itself being taken away. By this precau-

tion the muscles will be left in their full length, and, becoming connected, in the course of healing, with the mass of cellular tissue, fat, etc., which remains in the orbit, will constitute a cushion possessed of a certain degree of mobility. (*e*) Glass eyes will not wear for ever. Even with careful patients the artificial eye generally requires to be renewed, or, at least, re-enamelled, once a year. It becomes coated at the back by concretions from the tears, and is then so irritating that its disuse becomes necessary. To obviate this inconvenience, patients should always remove them at night, and have them carefully washed; they should also, if convenient, lay them aside for a few days whenever the eye becomes irritable, or a greater tendency to deposit is observed than usual. (*f*) Among the poor this liability to soon become unwearable is a serious objection to their use. Some Surgeons have, indeed, almost ceased to recommend them to their Hospital patients on this account, reserving their employment for cases in which the sufferer appears more than usually intelligent, and likely to succeed in the management. (*g*) Mr. Gray, (of Goswell street,) the maker of artificial eyes to the Ophthalmic Hospital, informed us, in answer to inquiries on this head, that he thought an artificial eye might, with ordinary care, be kept in a good state at a cost of about fifteen shillings a year. This estimate, of course, applies only to a pauper patient, to whom cost price only would be charged.

Browning of the conjunctiva from Nitrate of Silver.—When solutions of nitrate of silver are long employed as eye-drops it is not unusual for a conjunctiva to assume a brown or olive hue. The staining is permanent unless removed by remedies. Mr. Critchett ordered, in a case of this kind which presented itself at the Moorfields Ophthalmic Hospital a few weeks ago, a solution of iodide of potassium (gr. viij. ad ℥j.) to be freely used. He stated that he had seen this lotion diminish the stain, but had never known it effect a complete removal. Cases in which nitrate of silver drops are used should always be carefully watched, in order at once to desist, should this change of color be caused. The sulcus of junction of the ocular and palpebral conjunctiva is the part where the staining commences, and if the Surgeon be particular to inspect this frequently, he will run no risk.

Mechanical support in case of Pendulous Abdomen.—There are certain cases of enlarged and pendulous abdomen which, when they occur in women, often excite suspicions either of pregnancy or of ovarian disease. Their true pathological nature we once heard pointedly indicated by a Borough obstetrician in three words—"fat, fæces, flatus." Every one of experience will recognize the condition we refer to, the subjects of which are usually stout phlegmatic women, liable to flatulence and intestinal torpidity. The state is one often found difficult of relief. We observe that Dr. West, at St. Bartholomew's Hospital, insists strongly upon the benefits derivable from affording to the bowels mechanical support. By the use of an abdominal bandage, applied as tightly as it can well be borne, the symptoms often disappear very quickly, and a patient whom nothing could convince that she was not either pregnant or dropsical, may have at once her hopes dissipated and her fears dispelled. The use of tonics, and mild purgatives (*e. g.* aloes) at the same tim

of course advisable. Dr. West often employs frictions with tincture of aloes over the abdomen, with the object of restoring tone to the muscles of the abdominal wall and the intestines. We believe, however, that he considers mechanical support as the most important part of the plan. —*Medical Times and Gazette.*

Case of Chloroformization in Midwifery.

Dr. M'Clintock briefly related the history of a case of Chloroformization in Midwifery Practice, in order to show the great necessity that existed for always using the utmost caution and circumspection in the employment of choloroform inhalation in labor, as well as the great importance of intrusting its exhibition to none but a medical man. He did so because the writings and practice of some of the foremost advocates for anæsthesia had led many persons to suppose that the administration of chloroform to parturient cases was almost, if not entirely, free from danger,—a most dangerous fallacy, and one that would inevitably lead to disastrous consequences if generally acted on.

The leading circumstances of the case he brought forward were these: —A healthy woman, aged 28, was admitted into the Lying-in Hospital in labor of her first child, some days before. The first stage was very t dious in consequence of an unyielding condition of the os uteri, and much general irritability. With a view to relieve this state, and to give her some rest, as she was much harassed by frequent short pains, it was thought advisable to put her under the influence of chloroform. For about an hour she got it in small quantities,—in fact, merely *chloroform à la reine*,—but without experiencing any benefit, and without its producing any anæsthetic or soporific effect. The quantity put on the sponge, a large cup-shaped one, was now increased, but still could hardly have exceeded one drachm, and was not more than is habitually given in the hospital to patients undergoing obstetric operations, to which cases its use is chiefly limited; and it was administered by the senior assistant, who has had ample experience of its use, having given it before in hundreds of instances. After the sponge was reapplied to her mouth, and she had taken three or four inspirations, a change came over her countenance, the eyeballs turned up, the pulse left the wrist, respiration was suspended for a space of time that would have occupied about three or four inspirations, and some froth collected at the angles of the mouth. On the first appearance of these alarming symptoms the sponge was instantly withdrawn, the free circulation of fresh air was promoted, the face and chest were aspersed with cold water, and ammonia was applied to the nostrils. It should, perhaps, be mentioned, that during the entire of the above period she was in bed, and lying down. Under the influence of these restoratives animation gradually returned. It was evident, however, to all around—and many of the pupils were present—that she was all but gone, and that her life was preserved by the early recognition of the poisonous effects of the medicine, and the prompt and judicious employment of appropriate restoratives. Hardly any one will venture to deny that had this woman been in non-professional hands, her life would have been lost. That she got a dose of chloroform, which

to her was an overdose, is sufficiently obvious; and yet the quantity given, the quality of the chloroform used, the mode of exhibition, and even the administrator, were all the same as on hundreds of previous occasions, when everything went on favorably. Hence, then, the absolute necessity for *invariably and uniformly observing the strictest caution, prudence, and circumspection in the employment of this powerful agent, and never intrusting its exhibition to a non-medical person.* A case that strikingly illustrates these remarks is recorded in the Medical Times and Gazette for April 14, 1855, where a lady died in the course of a natural labor from the effects of chloroform administered to her by the nurse, on a handkerchief, without the sanction or knowledge of the doctor, who was in the house at the time. The quantity used in this case, with fatal effect, could not have exceeded five fluid drachms.—*Dublin Quarterly Journal—Transactions of the College of Physicians in Ireland.*

On Albumen as a Cholagogue. By DR. R. GIESELER of Göttingen. —I am anxious to call the attention of the profession, briefly, to the employment of the albumen of hen's eggs in certain forms of jaundice.

Bernard's experiments, showing that this substance is assimilable only through the intervention of the hepatic function, immediately suggested to me the idea that in albumen we might find an adequate excitant of the liver. I inferred, first, that fatty nutriment, and in a higher degree albuminous articles of diet, must be avoided in inflammation of the liver; and secondly, that in torpid conditions of that organ we might possess in albumen a remedy capable of stimulating it to increased activity. If to the liver be assigned the task of rendering albumen adapted to assimilation, this substance must be a stimulant of it, which will, *mutatis mutandis*, set its function to work, in the same manner as the administration of saline medicines does that of the kidneys. It is scarcely necessary to add, that the establishment of these results by experience must secure to albumen not merely the character of an adequate stimulant, but also pre-eminence over all other so-called cholagogues, since the action of the latter is very uncertain.

I think it unnecessary to demonstrate the remarkable efficacy of albumen in this respect by the recital of cases, since it was, as I soon learned, already known to our predecessors. It, however, appears to me not unimportant to point out the source whence it would appear the recommendation to employ albumen as a remedy in jaundice was originally derived. Charles White, in his work on "The Treatment of Pregnant and Puerperal Women," states, that he once suffered for several weeks from jaundice, and was very much reduced. Soap, aloes, iron, and rhubarb, had been taken without the least benefit. A navy officer, happening to visit him, assured him he would cure him in a short time. He told him, in fact, that while on a voyage some time before, he was attacked with the same disease, and had in vain used the remedies prescribed by the surgeon of the vessel. A Spanish physician of the island of Minorca then advised him to take every morning, while fasting, two raw

eggs, both yolk and white, in a glass of water, and to repeat the dose with one egg every four hours during the day. He followed this advice, and in three days his motions were again colored with bile. White tried the plan suggested, and found the effect attributed to the albumen to be confirmed; in three days the fæces were colored, which they had not been for six weeks before. He continued the use of the eggs for some months. He subsequently recommended the remedy to several patients, and always with good effect, except in cases in which the jaundice preceeded from the presence of gallstones. So far for the testimony of Mr. White. In the more modern treatises on therapeutics I have not been able to find any allusion to this application of albumen; the present communication cannot, therefore, be considered superfluous. A few of the older works recommend, not white of egg, but the yolk, probably on account of its yellow color. It is indeed possible that the action of the liver may be excited, not by the vitellin of the yolk, but merely by the albumen of the egg, with which Bernard experimented, and which White recommended in jaundice. Should this supposition prove correct, it would explain why the remedy lapsed into oblivion, and would furnish an important proof in our day for the often misunderstood truth, that practical results do not become the property of science or art, until they are referred to correct principles.—*Dublin Quarterly Jour. from Zeitschrift fur Rationelle Medicin*, 1854.

On the Extensive Diffusion and Frequency of Starch Corpuscles in the Tissues of the Human Body. By THOMAS ALBERT CARTER.—Two years have now almost elapsed since Virchow first published his paper upon the presence of cellulose in the brain and spinal cord of man; in which he proved that the ependyma and its continuations contained bodies which, with sulphuric acid and iodine, struck a violet color, concluding from this circumstance that their chemical composition was that of cellulose. He also found them in the olfactory and optic nerves, and in a "waxy" spleen. Subsequently, Rokitansky observed similar bodies in the optic nerve, and Kölliker in the retina. It remained, however, for Mr. Busk to establish the fact, that the so-called cellulose corpuscles of Virchow were absolutely identical in every property—whether optical, physical, or chemical—with starch.* He, moreover, showed that this substance occupies a place in the tubular and vesicular portions of the human cerebrum and cerebellum. Since the valuable observations of Busk made their appearance, Mr. Stratford, of Toronto, has published a short paper† "upon the presence of starch in the blood of an epileptic patient," in which he also states, that he has met with it in the eye of a boy, removed in consequence of fungus hæmatodes, and in several specimens of urine.

In December last, an unsuccessful attempt to make out the intimate structure of an indurated tumour involving the optic nerve, induced me, as a last resource, to apply the appropriate tests for the detection of

* *Quarterly Journal of Microscopical Science*, for January, 1854.
† Ibid., for January, 1855.

cellulose. To my great surprise, after the addition of the reagents, I noticed a number of bodies, generally circular or oval in outline, passing from the lightest shades of purple to the densest black: these were evidently the cellulose corpuscles of Virchow, or the starch bodies of Busk, the latter of which they have since proved to be. Shortly afterwards I observed the same bodies in the pineal gland of man, and of the sheep. I then abandoned this subject, more urgent duties soliciting my attention, but resumed its investigation about the middle of last May, and have continued it up to the present time.

It is unnecessary to give a description of the "amyloid" corpuscles, and the proofs in favor of their being actually starch, for this would be simply reiterating the statements of Busk respecting them, which by experiment I have found to be perfectly correct. It may, however, be remarked that, in my examinations of structures from the human subject, I have encountered two distinct varieties—the one (described by Busk) resembling wheat starch, the other, and rarer kind, corresponding in every particular with that derived from the potato. In dimensions they vary much, ranging from 1–195th to less than a 1–4000th of an inch in diameter, the usual size being the 1–1000th.

The following are the observations I have had an opportunity of making on a number of cases, and these, it must be remembered, have not been selected, but given in the order in which they presented themselves, none being suppressed.

Observation 1. A man, N., æt. 39 years who died of phthisis pulmonalis, complicated with albuminuria.

A micro-chemical examination of the liver, which was of twice its ordinary weight, and presented in a marked degree the characters of waxy degeneration, revealed the presence of starch in great abundance. One demonstration exhibited fifty-two bodies of the ordinary size, adhering to, or imbedded in, a mass of transparent homogeneous tissue.

In the spleen and kidney, which were also "waxy," starch was found, abundantly in the former, in the latter somewhat sparingly.

Obs. 2. A woman, J. B., æt. 59 years, who died of apoplexy.

The tubular matter of the cerebrum, immediately surrounding the appoplectic clot, was subjected to an examination, and in it were found, associated with numerous compound granular cells, numbers of starch corpuscles. This observation does not apply to the healthy portions of the same brain, for, after a prolonged search, none could be detected. An ordinary amount* was observed in the spleen, kidney, and liver of this subject, all of which appeared perfectly mormal.

Obs. 3. A female, M. R., æt. 24, who died of phthisis pulmonalis.

* The expressions "small quantity," etc., I am aware, are extremely vague and indefinite; yet, by attaching to them a certain numerical value, they communicate an idea of amount with sufficient exactitude, and obviate the necessity of giving the precise number of bodies in each demonstration, which, to say the least of it, would have been a very tedious process. By the term "small quantity," as applied to the contents of a preparation, I wish the reader to understand from one to three corpuscles; by "ordinary amount," from five to eight; by "large amount," from ten to twenty or more. The value of synonyms, or intermediate expressions, will, of course, be duly appreciated.

In the liver, which was somewhat waxy and slightly enlarged were found starch bodies of irregular form, as if developed in masses under pressure.

The spleen yielded a few. This, like the former organ, was in some degree waxy.

They were very numerous, and of large dimensions, in the kidney many attaining to the 1–400th part of an inch in diameter.

I noticed, in the pancreas and mesenteric glands of this subject, numbers of corpuscles, generally of oval form, measuring about the 1–400th of an inch in their longest, and about half that in their shortest diameter. The hilum was placed near one extremity, with a series of concentric elipsoidal markings surrounding it. Moreover, when seen by polarised light, they exhibited the four black or colored radii diverging from the hilum; in fact, they were in every respect identical with the amylum of the potato.

Obs. 4. A female, J. H., æt. 23 years, who died of phthisis pulmonalis.

Starch was found in the liver, kidney, spleen, pancreas, mesenteric glands, and supra-renal capsules, all of which organs were healthy, with the exception of the mesenteric glands, these being slightly enlarged: also in an indurated tubercular mass from the lung.

Obs. 5. A man, J. B., æt. 38 years. The immediate cause of death unknown. The heart and larger vessels, however, were diseased.

In the liver (slightly enlarged, but in other respects healthy,) kidneys, supra-renal capsules, spleen, corpora striata, pituitary body, and Pacchionian glands, starch was found. None could be discovered in the pancreas, after a very careful and prolonged search. This organ was very flaccid, and apparently diseased.

Obs. 6. A man, Y., æt. 17 years, who died of general anasarca.

The liver of this subject was congested, and to a small extent fatty; the spleen rather pulpy; both exhibited the usual amount. The pancreas, which was flabby, yielded a very small quantity. In a mass of degenerate pus found adhering to the peritoneal surface of the bladder, and in chronic pericardial exudation matter, they were also prese nt.

Obs. 7. A boy, P., æt. 14 years, who died of apoplexy.

The liver, spleen, kidneys, supra-renal capsules, thyroid body, tonsils, and brain, contained starch in greater or less quantity. The kidney, in this case, was the viscus in which they were principally developed, both as regards number and size. By mensuration, I ascertained that one of them exceeded the 1–200th of an inch linear. All the organs appeared quite healthy.

Obs. 8. A youth, æt. 17 years, whose death was occasioned by an enormous fibro-nuclear tumour growing from the abdominal parietes, and general anasarca.

The existence of starch was determined in the liver, spleen, supra-renal capsules, and pancreas; in the last mentioned organ the rarer variety. It was found in all parts of the tumour with the greatest facility.

Obs. 9 and 10. A female, E. G., æt. 16 years, and a man, A. C., 43 years of age, both of whom died of phthisis.

The following organs, which appeared healthy in both, contained the ordinary quantity :—the livers, kidneys, pancreatic and mesenteric glands. The supra-renal capsules of A. C. were examined, and with a like result.

Obs. 11. A man, æt. 33 years, who died of jaundice, together with œdema and erysipelas of the lower extremities.

All the organs mentioned in the two preceding cases were examined, and positive evidence of the presence of starch obtained ; but the quantity in each was excessively small, more especially in the pancreas. With the exception of the liver, which was in an incipient state of cirrhosis, and deeply impregnated with the coloring matter of the bile, all the viscera were normal.

Among, and also within, the wavy bundles of fibrous tissue from the mesentery, starch grains of the ordinary dimensions were scattered with tolerable regularity, but for the most part at rather wide intervals.

Obs. 12. A child three weeks old. Cause of death unknown.

The liver contained a more than ordinary quantity : the kidney, spleen, and pancreas, the usual amount.

Obs. 13. A man, D. L., æt. 25 years, who died of diabetes mellitus.

Starch was of excessively rare occurrence in the liver of this subject; less rare in the pancreas; and the general amount observed in the spleen, kidneys, mesentery, and the white and grey matters of the cerebrum. Little was seen in the cerebellum.

In the ovaries and healthy portions of the lungs of two individuals who died of phthisis, its presence was determined ; but none was discovered in the muscular substance of their hearts.

With a view of deciding whether starch is peculiar to the human subject, I submitted to examination the cerebrum, cerebellum, the liver, lung, spleen, kidney, striped muscular and areolar tissues, from the sheep ; also the liver, lung, and yellow elastic tissue from the ligamentum nuchæ of the ox, the same facts being established regarding the structures from these animals as were previously mentioned with respect to man.

My observations have not been restricted to organs and tissues entirely, but extended to the various secretions and products of the body, in their normal as well as abnormal conditions. Thus, I have seen starch in healthy blood drawn from the finger, in pus, cancer juice, chronic lymph, bronchitic sputum, icthyosis scales, tubercular matter from the lung, and in the urine (both alkaline and acid) of patients laboring under divers maladies :—Bright's disease, dyspepsia, acute articular rheumatism, pneumonia, etc. In some instances, it was associated with oxalates and phosphates, in others with uric acid and urates, and, again, as in the case of Bright's disease, and of a convalescent from rheumatism, with no deposit, save an almost inappreciable amount of epithelial debris.*

* The great majority of the above cases have occurred in the clinical wards of Prof. Bennett, to whom I have shown these bodies in the tissues and fluids referred to, and who has confirmed their presence.

It may appear astonishing or perhaps incredible to many, that a substance so universally distributed should for such a long period have remained almost unnoticed by microscopical observers. The solution of this apparent enigma will, however, appear sufficiently simple when fully explained. It is well known to those who have applied themselves to the histological study of the various organs and tissues that fatty matters, frequently in the form of oil-globules, are almost invariably interspersed among the morphological elements of which they are composed. Now, to these globules the animal starch corpuscle bears a very marked resemblance, not merely in general form, but likewise in refractile properties. Can it then be looked upon as a matter of surprise, that the two have been confounded by those who have neither by chemical nor other means endeavored to discover their nature? In some instances, when recognised, as they often have been in the urine, they were considered either as fraudulent additions to, or accidental admixtures with, this excretion; possibly, with correctness in some cases, though by no means in all, as I have satisfied myself by experiments the most rigid.

Professor Bennett has pointed out to me the observations made by Schrant on Colloid corpuscles, and from the figures published by that observer, it would appear very probable that these also must occasionally have been mistaken for those of starch.*

If, then, the facts here recorded be taken for granted, the question immediately suggests itself:—are starch granules, when met with in the localities enumerated, the offspring of pathological causes, or the results of the healthy action of the economy? The majority of cases cited clearly show that they must generally be esteemed as physiological products, although, as with the other constitutents of the healthy body, an excess or diminution of them, or an *error loci*, may induce or constitute disease, and will probably hereafter be found to do so.

Regarding their functions, little can in the present state of our knowledge be said, except, perhaps, that they may be looked upon as thermogenic magazines, analogous to, but not identical in action with, the fat cell. We may indeed suppose, from their easy convertibility into grape sugar, and of this by oxidation into carbonic acid and water, that from them caloric is generated when a sudden demand is made for it by the system. Another, and a totally different view may be taken of the purpose they subserve in the economy, and one which does not carry us beyond the limits of possibility; viz., that instead of being converted into the compounds previously mentioned, they are simply metamorphosed into the lactic acid of the gastric secretion.

I certainly anticipated that an examination of the organs from the diabetic subject would have furnished a clue to the comprehension of the physiological and pathological importance of starch, but in vain. Upon reference to this case, it will be observed that, although of very rare occurrence in the hepatic and pancreatic organs, the usual amount was present in the others, so that no conclusive inferences could be drawn.

The development of individual starch grains in the plant is involved

**De Colloid-metamorphose der cel.*

in so much obscurity that botanists have but partially elucidated the subject. I therefore refrain from hazarding an opinion upon their mode of growth in the animal tissues, though inclined to believe that both in the plant and animal their development is similar. In the former, as a general rule, a number of corpuscles is produced within the cavity of a cell; in the latter, this condition is apparently the exception. I have certainly, now and then, seen them occupying the cavity of large flaccid cells, but more frequently either isolated, or aggregated and cohering by interposed homogenous matter, which was either tinged yellow or remained unaffected by the solution of iodine.

Before concluding, let me remark that the chief aim in bringing these crude facts before the public has been to show that man, in common with some of the lower animals, must be regarded as a starch secreting organism, thus adding strength to that connection which exists between the animal and vegetable worlds.—*Edinburgh Medical Journal.*

Abstract of Meteorological Observations for July, 1855, *made at Philadelphia, Pa. Latitude* 39° 57′ 28″ *N., Longitude* 75° 10′ 40″ *W. from Greenwich.* By Prof. James A. Kirkpatrick.

1855. July.	Barometer. Daily Mean	Barometer. Mean Daily Range.	Thermom. Daily Mean	Thermom. Mean Daily Range	Dew Point 2 P.M.	Force of Vapor 2 P.M.	Rel. Humid. 2 P.M.	Rain.	Prevailing Winds.	Remarks.
	Inches.	Inches.	Deg.	Deg.	Deg.	Inches.	Hunds.	Inch.	Points.	
1	29.739	.036	85.7	3.0	70.6	.749	.53		SSW.	Clear; ev. heat lightning.
2	29.770	.058	84.3	2.0	67.0	.662	.52		SW.	M. and aft. clear; ev. cloudy.
3	29.950	.180	82.3	2.0	62.7	.570	.47		(Var.)	Cloudy.
4	29.853	.097	80.7	1.7	68.2	.689	.57	0.145	SW.	Cloudy; aft. and ev. *rain*,
5	29.884	.058	80.3	2.3	64.0	.597	.53		(Var.)	M. cloudy; aft. and ev. clear.
6	29.825	.070	78.0	2.3	73.6	.828	.78	0.165	(Var.)	Cl'y; *showery;* th'r & l'ng.
7	29.742	.109	69.0	9.0	63.8	.591	.89	1.353	NW.	Cloudy; m. and aft. *rain.*
8	29.965	.224	70 5	8.2	52.4	.395	.43		NNW.	Clear.
9	30.037	.071	73.3	3.8	58.8	.497	.45		(Var.)	M. clear; aft. and ev. cloudy.
10	29.883	.151	75.3	3.3	68.8	.703	.73		SW.	M. and ev. clear; aft. cloudy.
11	29.761	.122	79.3	5.7	69.3	.716	.64		SW.	M. and aft. cloudy; ev. clear.
12	29.743	.018	81.3	2.0	63.9	.594	.48		W.	Clear.
13	29.685	.058	80.8	1.8	72.1	.788	.68		SW.	Cloudy. *Bar. lowest* 29.645.
14	29.828	.143	79.8	1.0	61.4	.544	.47		NW.	Clear.
15	30.083	.255	78.5	2.0	64.6	.608	.51		NE.	Cloudy. *Bar. highest* 30.135.
16	30.107	.048	80.8	2.3	68.8	.704	.59		W.	M. hazy; aft. & ev. cloudy.
17	29.990	.116	83.7	2.8	73.4	.821	.62		SW.	M. cloudy; aft. and ev. clear.
18	29.863	.128	86.7	3.0	75.2	.873	.61		W.	M. and aft. cloudy; ev. clear.
19	29.755	.108	88.0	2.0	73.2	.818	.50		W.	Clear. *Th. highest* 95°
20	29.755	.054	84.3	4.3	74.2	.845	.54	2.835	(Var.)	Cloudy; ev. *rain*, th'r & l'ng.
21	29.852	.097	67.8	16.5	61.7	.550	.82	0.608	NE.	Cl'y; *driz'ng & raining* all day
22	29.958	.106	64.2	6.0	62.8	.570	.89	0.330	NE.	Cl'y; m. & a. *rain. Th. l'st* 57°
23	29.954	.019	72.3	8.2	68.3	.692	.77		(Var.)	Cloudy.
24	29.900	.055	80.8	8.5	76.4	.908	.75	0.167	SE.	Cl'dy; *showery;* ev. heat l'ng.
25	29.853	.047	83.7	2.8	78 5	.975	.76		WSW.	Cloudy.
26	29.792	.061	85.3	1.7	75.2	.872	.69	0.248	SW.	Cl'y; m. & ev. *rain*, with l'ng.
27	29.740	.052	85.0	1.0	73.6	.829	.60		SW.	Clear.
28	29.741	.010	82.3	2.7	73.9	.835	.65		NNE.	M. cloudy; aft. and ev. clear.
29	29.787	.046	84.8	2.5	71.2	.763	.56		NW.	M. cl'y; aft. & ev. cl'r. [*rain.*
30	29.780	.025	80.5	4.7	69.3	.716	.64	0.743	(Var.)	Cl'y; 1P.M. th. & l'ng; 2 to 8P.M
31	29.799	.041	81.7	2.8	71.6	.774	.64		(Var.)	M. cloudy; aft. and ev. clear
Means for July, 1855.	29.851	.086	79.7	3.9	68.7	.712	.62	6.594	S. 68° W., 43–100.	
Means for July, 5 yrs.	29.878	.082	77.6	3.7	59.4			5.780	S. 73½° W., 17–100.	

The Monthly Range of the Barometer was 0.490 of an inch, and of the Thermometer 38°.